

LANDSCAPE DEVELOPMENT PLANS FOR;

REVERSE FRONTAGE TRACT # 27288 & 27289

GENERAL NOTES

- GENERAL NOTES FOR REVERSE FRONTAGE LANDSCAPING
- All related work shall conform to the City of Riverside Park and Recreation Department Standards and City of Riverside policies.
 - When calling for inspections, contact the Park Projects Inspector a minimum of 48 hours in advance at (714) 782-2223 to schedule an inspection. A Field Notice will be issued as written approval for each stage of inspection. A verbal approval will not be acceptable. Inspections are at the following times during the course of the project:
 - Prior to commencement of any work, for the purpose of a pre-construction meeting;
 - Prior to the installation of irrigation lines or components;
 - Prior to pouring concrete for inspection of hardscape formwork;
 - During hydrostatic pressure test of irrigation mainline prior to backfill of trenches;
 - Inspection of lateral lines and heads prior to backfill of trenches;
 - Upon completion of fine grading, but prior to commencement of soil preparation, for acceptance of fine grading work;
 - Inspection of completed finish grading work after soil amended work;
 - Upon completion of the irrigation system for a coverage test and demonstration of the system as fully operational;
 - When plant locations have been spotted in the field but prior to digging plant pits;
 - While digging plant pits and planting/relocating trees;
 - During application of pre-emergent chemical treatment shall be applied at the following times during the contract:
 - At formal quarterly inspections;
 - After completion of the maintenance period.
 - Upon receipt of written acknowledgement of the City's final acceptance, the developer will be released from maintenance. (Until receipt of written notification from the City that the Park and Recreation Department is assuming maintenance responsibilities, the developer shall remain responsible for the project.)
 - The developer shall be responsible to have all plantings acceptability maintained for a minimum of one (1) year/two (2) years.
- SPECIAL NOTES:
- ALL WIRES UNDER PAVEMENT SHALL BE INSTALLED IN A SEPARATE SLEEVE FROM PIPING PER CITY OF RIVERSIDE - PARK AND RECREATION DEPARTMENT STANDARDS.
 - ALL PIPING UNDER PAVEMENT SHALL BE INDIVIDUALLY SLEEVED PER CITY OF RIVERSIDE - PARK AND RECREATION DEPARTMENT STANDARDS.
 - IRRIGATION SYSTEMS SHALL BE SPLIT AND VALVED IN A MANNER TO AVOID NON-PRESSURIZED LATERAL LINES UNDER STREETS. ONLY PRESSURIZED LINES ARE PERMITTED UNDER STREETS.
 - ANGLED FITTINGS ARE NOT ALLOWED IN PIPE OR WIRE SLEEVING.

SHEET INDEX

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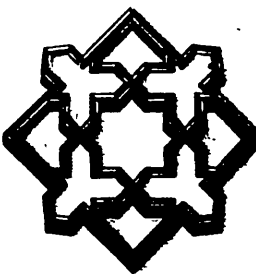
NOTE:
ALL LANDSCAPE & IRRIGATION WORK IS TO BE SUPERVISED BY THE LANDSCAPE ARCHITECT & THE PARK & RECREATION DEPARTMENT, & THAT UPON COMPLETION OF THE PROJECT, THE LANDSCAPE ARCHITECT WILL CERTIFY THAT THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS.

PREPARED FOR:

VAN DAELE DEVELOPMENT CORP.
2900 ADAMS ST. STE C-25
RIVERSIDE, CA. 92504
PROJECT MANAGER: PAT VAN DAELE
(714) 354-2121

TOTAL SQ. FT. IN PUBLIC LANDSCAPE = 104,500 S.F.
TOTAL TREES IN PUBLIC LANDSCAPE = 36 - 15 GAL.
175 - 24" BOX

NOTE:
FOR REVERSE FRONTAGE WALL CONSTRUCTION AND PLACEMENT DETAILS, SEE APPROVED STREET IMPROVEMENT PLANS.



ALHAMBRA GROUP
LANDSCAPE ARCHITECTURE
CA Lic. #11560 CA Lic. #2017
RECREATION FACILITIES PLANNING
27412 Enterprise Circle West, Suite 208
Tombala, CA 92506 (714) 678-0226
Job No. 92-033

All designs and ideas represented hereon are the property of Alhambra Group, Landscape Architects, and are to be used on this project only. They shall not be used otherwise without the written permission of said Landscape Architects. Any changes made by parties other than said Landscape Architects shall relieve Landscape Architects of responsibility for the project or effected portion thereof.

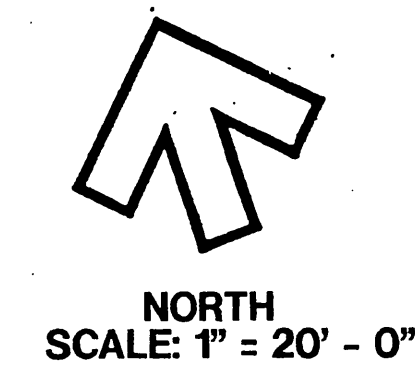
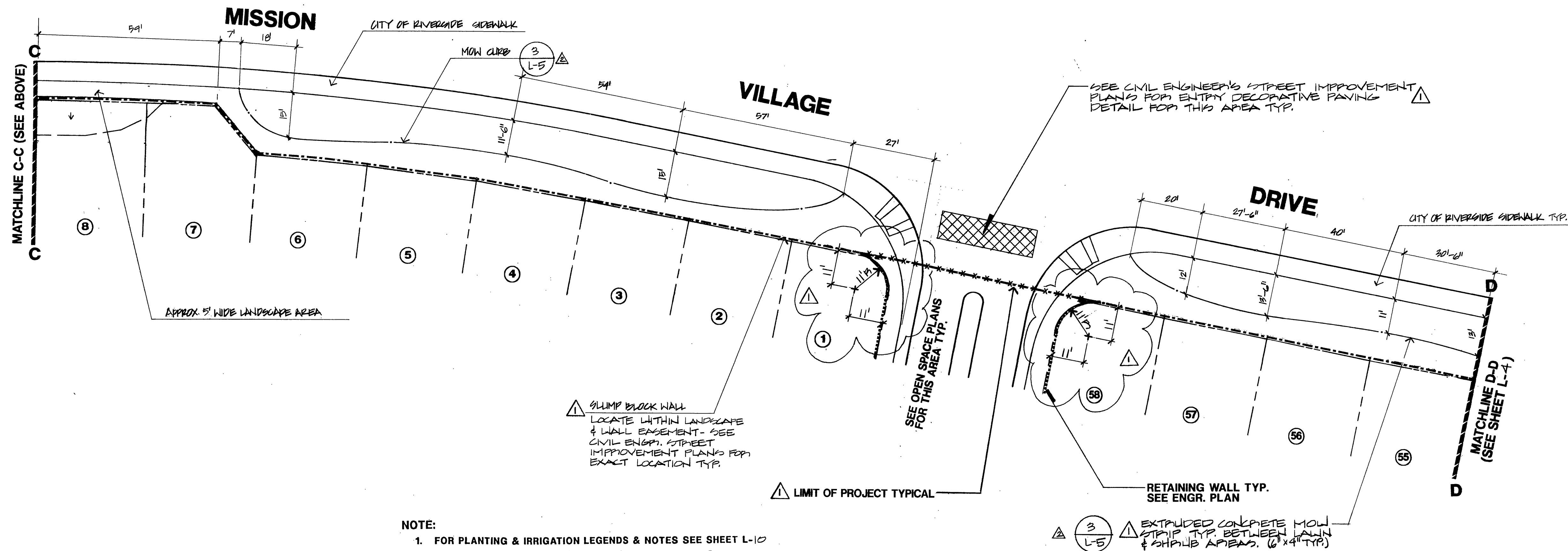
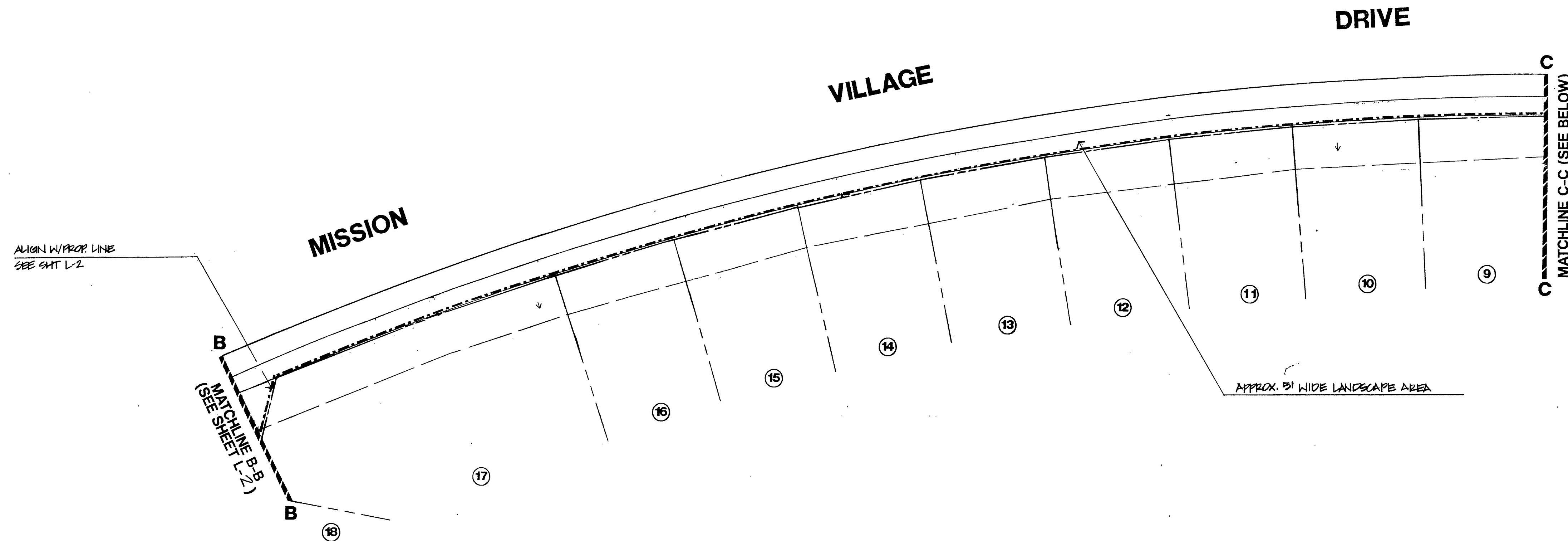
DESIGNED BY	DRAWN BY	CHECKED BY
DATE	DATE	DATE
REVISIONS		

PLANNING	PUBLIC UTILITIES ELECTRIC	WESTERN MUNICIPAL WATER DISTRICT
Signature: <i>P. Milosavljevic</i>	Signature: _____	Signature: _____
Date Approved: 5/25/93	Date Approved: _____	Date Approved: _____
CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT		
APPROVED BY: <i>P. Milosavljevic</i>	DATE: 5/25/93	BY: <i>P. Milosavljevic</i>
PRINCIPAL ENGINEER	DATE: 5/25/93	BY: <i>P. Milosavljevic</i>
PARK DEPARTMENT	DATE: 5/25/93	BY: <i>P. Milosavljevic</i>
TRAFFIC DIVISION	DATE: 5/25/93	BY: <i>P. Milosavljevic</i>
CHIEF P.W. ENGINEER	DATE: 5/25/93	BY: <i>P. Milosavljevic</i>

TRACT # 27288 & 27289
REVERSE FRONTAGE
TITLE SHEET

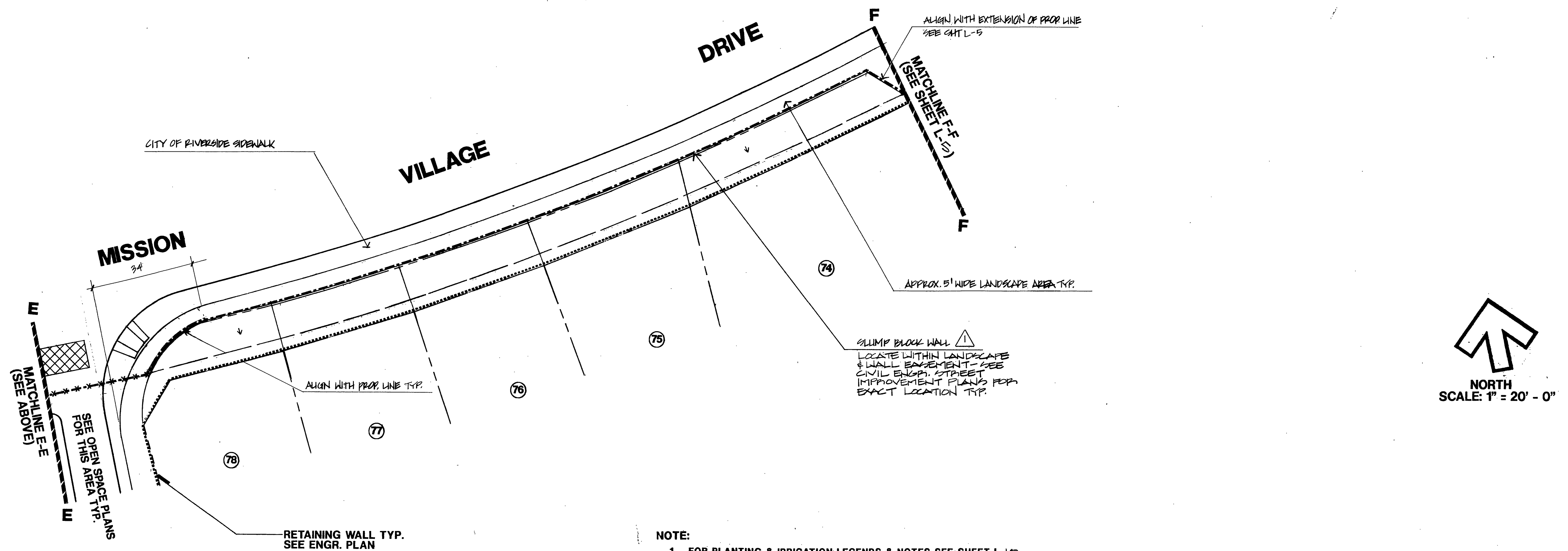
ACCOUNT NO.
R-3313 L
SHEET L-1 OF 17

DP-018-923 DMB-10-14-92 LAD/DMB
INDEXED 6-2-93 LHM

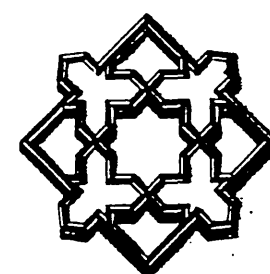


- NOTE:
1. FOR PLANTING & IRRIGATION LEGENDS & NOTES SEE SHEET L-10
 2. FOR PLANTING & IRRIGATION DETAILS SEE SHEET L-15
 3. FOR PLANTING & IRRIGATION SPECIFICATIONS SEE SHEET L-16 & L-17

<p>All designs and ideas represented hereon are the property of Alhambra Group, Landscape Architects, and are to be used on this project only. They shall not be used otherwise without the written permission of said Landscape Architects. Any changes made by parties other than said Landscape Architects shall relieve Landscape Architects of responsibility for the project or effected portion thereof.</p>	<p>ALHAMBRA GROUP LANDSCAPE ARCHITECTURE CA Lic. #1559 CA Lic. #2017 RECREATION FACILITIES PLANNING 27412 Enterprise Circle West, Suite 200 Temecula, CA 92590 (714) 676-0226 Job No. 92-033</p>	PER CITY DEPT. PER CITY REG.	V.C. 16/4/92 V.D. 4/22/93	CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT APPROVED BY _____ DATE 5/24/93 PARK DEPARTMENT _____ TRAFFIC DIVISION _____ CHIEF P.W. ENGINEER _____	APPROVED BY _____ DATE 5/28/93 PUBLIC WORKS DIRECTOR _____	TRACT # 27288 REVERSE FRONTAGE CONSTRUCTION PLAN	ACCOUNT NO. R-3313 L SHEET L-3 OF 17	
		DESIGNED BY V.D. DRAWN BY C.B. CHECKED BY V.D.		DATE 5/24/93	DATE 5/28/93	HORIZ. SCALE: 1" = 20' - 0" VERT. SCALE: 1" = 0'	INDEXED 6-2-93	



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CA Lic. #1569 CA Lic. #2017
RECREATION FACILITIES PLANNING
27412 Enterprise Circle West, Suite 200
Temecula, CA 92590 (714) 676-0226
Job No. 92-033

⚠	PEP CITY PED.	SIC.	1041
⚠	PER CITY RES.	V.D.	4/28
MARK	REVISIONS	APPR.	DATE
DESIGNED BY <u>V.D.</u>		DRAWN BY <u>CG</u> CHECKED BY <u>VD</u>	

CITY OF RIVERSIDE

PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY	APPROVED BY
PRINCIPAL ENGINEER	5/26/93	SA	 PUBLIC WORKS DIRECTOR
PARK DEPARTMENT	5-25-93	SA	
TRAFFIC DIVISION			
CHIEF P. W. ENGINEER	5/25/93	SA	
	5/26/93	SA	DATE 5/28/93

**TRACT # 27288 & 27289
REVERSE FRONTAGE
CONSTRUCTION PLAN**

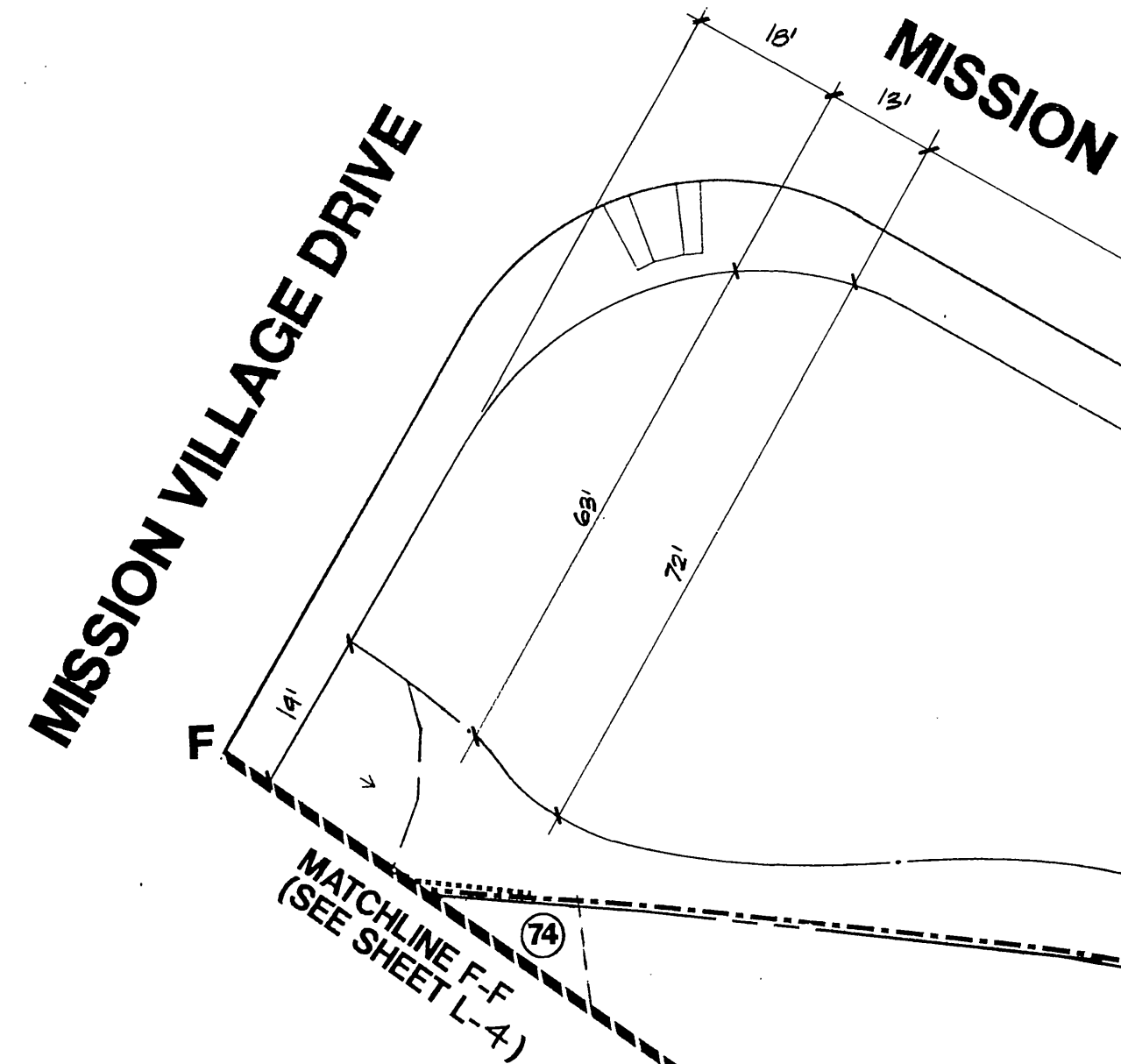
ACCOUNT NO.

R-3313 L

SHEET **L-4** OF 17

INDEXED 22-93 4H

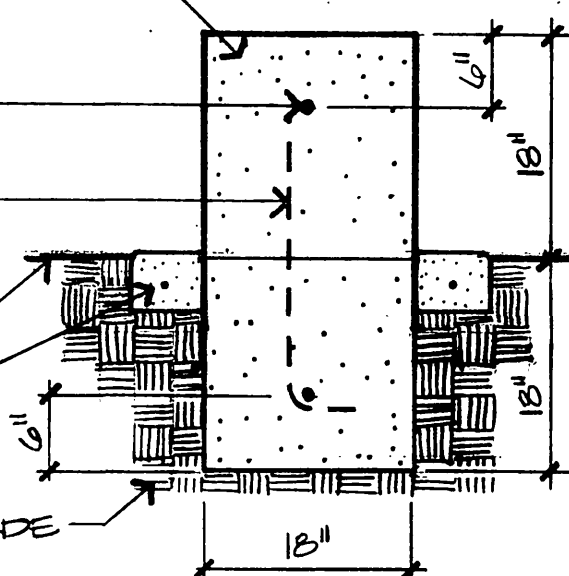
PC 3532-R



SLUMP BLOCK WALL & LOCATE WITHIN LANDSCAPE & WALL EMBLEMMENT - SEE CIVIL ENGINEER STREET IMPROVEMENT PLAN FOR EXACT LOCATION TYP.

EXTRADED CONCRETE MOW STRIP TYP. BETWEEN LAWN & SHrub AREAS. (4" x 4" TYP.)

18" x 24" CONG. ENTRY WALL W/ SMOOTH FINISH - POLIP IN PLACE (NATURAL GREY COLOR)
#4 CONT. HORIZ. REBAR TYP. 2 PLACES
#4 REBAR (VERTICAL) @ 3'-0" O.C. TYP. - START 18" MIN. FROM END OF WALL (BOTH ENDS) FINISH GRADE
EXTRADED CONG. MOW STRIP TYP. ALL SIDES SEE DETAIL 3, THIS SHEET
COMPACTED SUB-GRADE TO 90% REL. COMP.

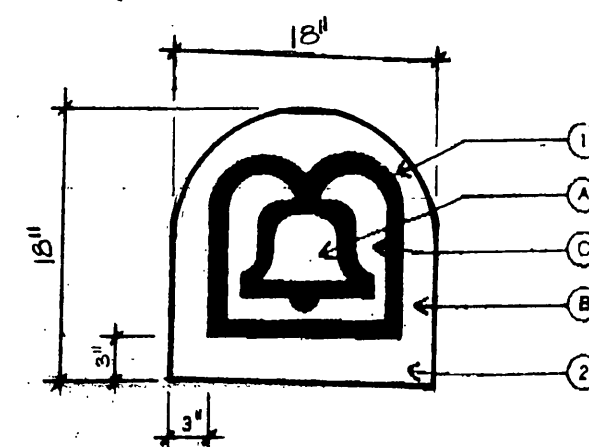


SECTION

CORNER WALL DETAIL

NOTE:

1. FOR PLANTING & IRRIGATION LEGENDS & NOTES SEE SHEET L-10
2. FOR PLANTING & IRRIGATION DETAILS SEE SHEET L-15
3. FOR PLANTING & IRRIGATION SPECIFICATIONS SEE SHEET L-16 & L-17



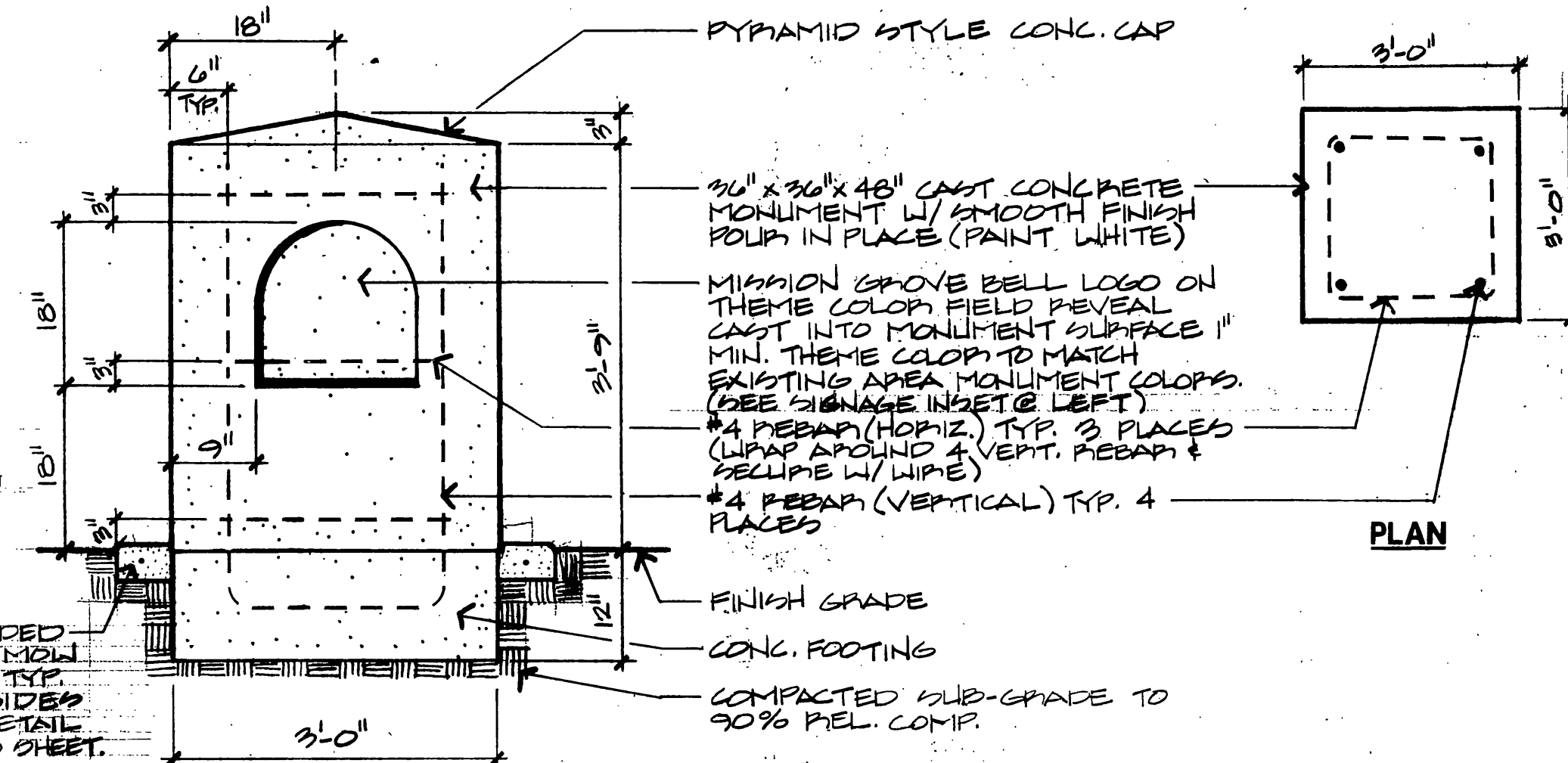
1. 1" DEEP CAST REVEAL IN LOGOBOARD
2. 2" THICK CAST CONCRETE (3000 PSI) PROJECT LOGO BOARD - SANDBLAST FINISH (SEE ELEVATION & PRIGHT)

PAINT SCHEDULE

- A. PANTONE 170C OR EQUAL
- B. PANTONE 169C OR EQUAL
- C. PANTONE 318C OR EQUAL

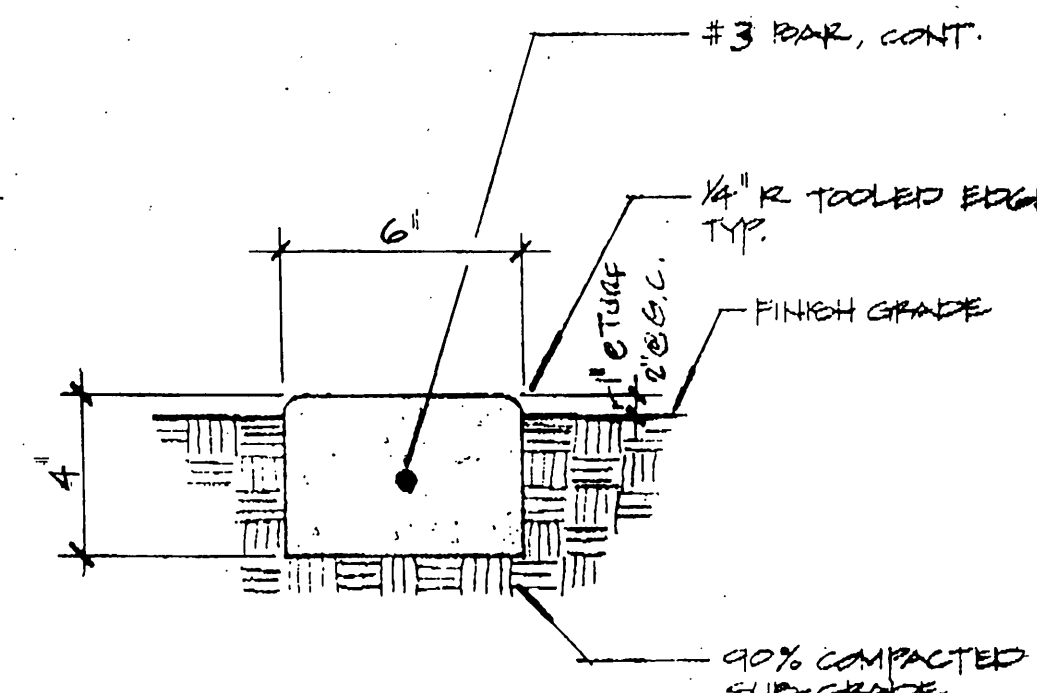
SIGNAGE INSET

EXTRADED CONG. MOW STRIP TYP. ALL SIDES SEE DETAIL 3, THIS SHEET.

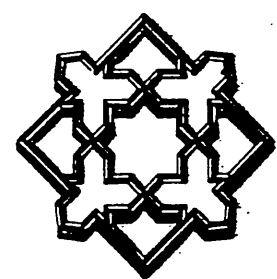


CORNER SIGN DETAIL

NORTH
SCALE: 1" = 20' - 0"



EXTRADED CONG. MOW STRIP



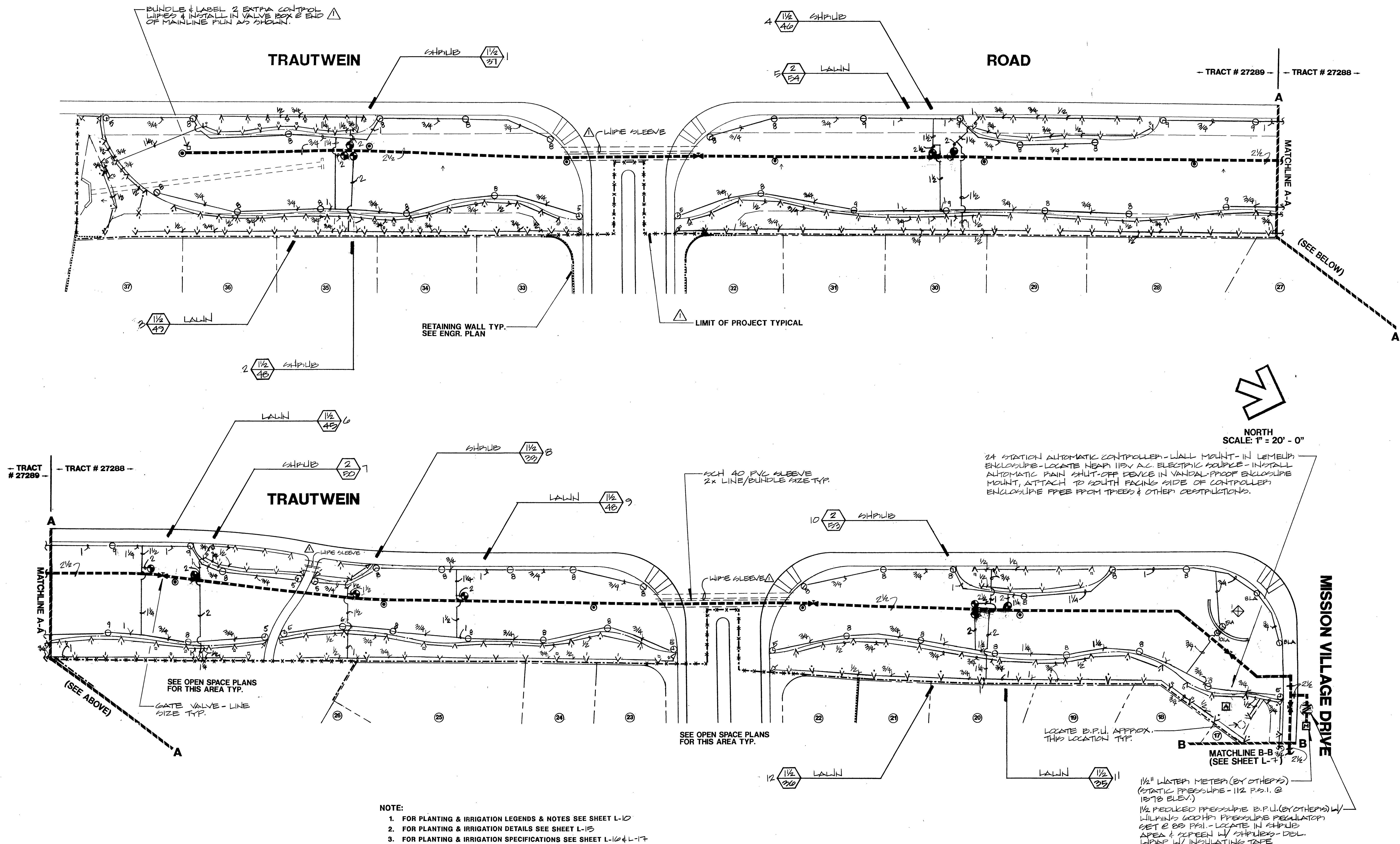
ALHAMBRA GROUP
LANDSCAPE ARCHITECTURE
CA Lic. #1569 CA Lic. #2017
RECREATION FACILITIES PLANNING
27412 Enterprise Circle West, Suite 200
Tombala, CA 92590 (714) 676-0220
Job No. 92-033

DESIGNED BY	VD	DRAWN BY	CE	CHECKED BY	VD
REVISIONS		APPR.	DATE		
MARK					

CITY OF RIVERSIDE	
PUBLIC WORKS DEPARTMENT	
APPROVED BY	DATE
PRINCIPAL ENGINEER	5/24/93
PARK DEPARTMENT	5/25/93
TRAFFIC DIVISION	5/25/93
CHIEF P.W. ENGINEER	5/25/93

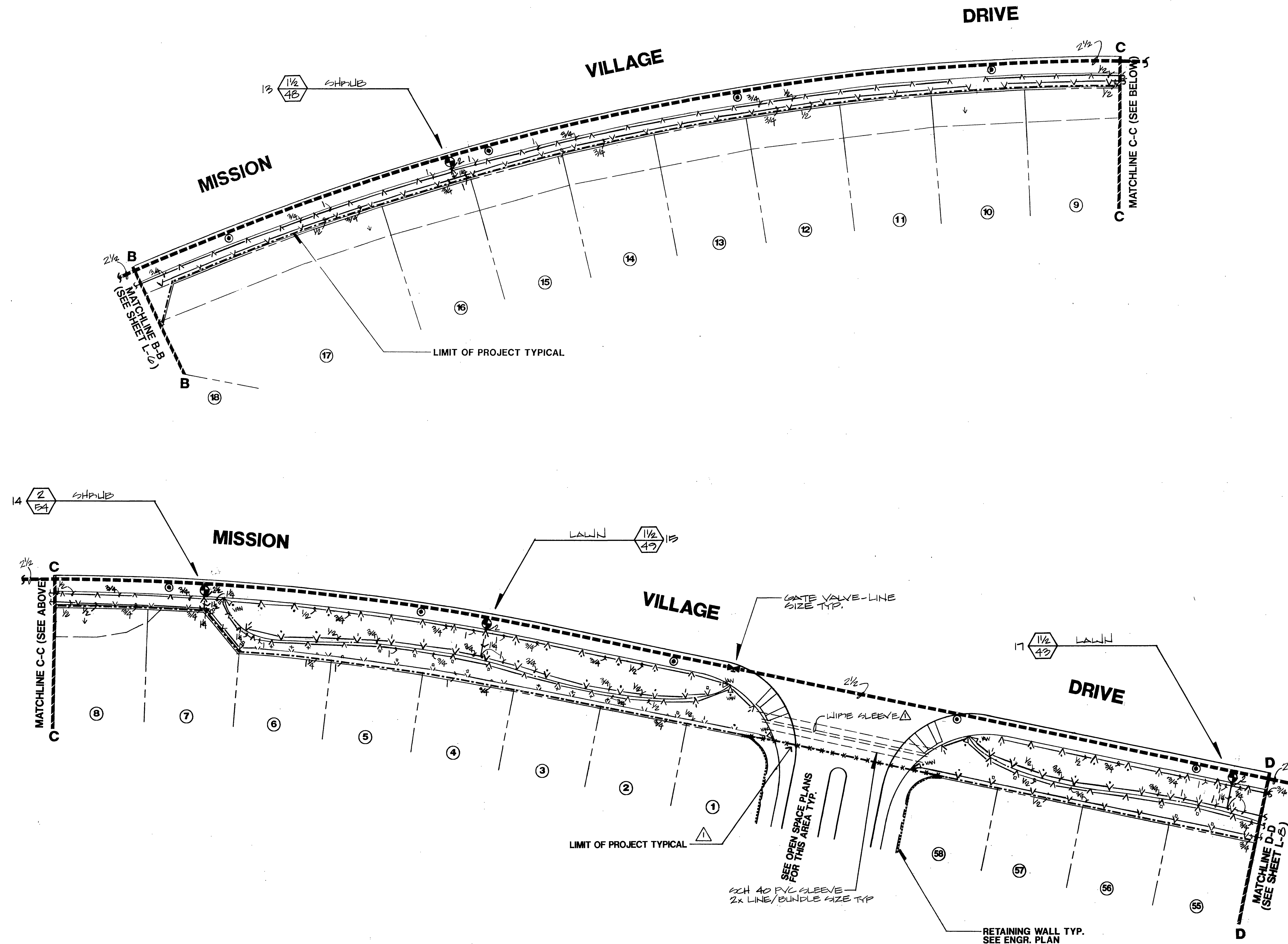
TRACT # 27289	ACCOUNT NO.
REVERSE FRONTAGE	R-3313 L
CONSTRUCTION PLAN	L-5 OF 17
HORIZ. SCALE: 1" =	VERT. SCALE: 1" =

INDEXED 6-2-93 4/1



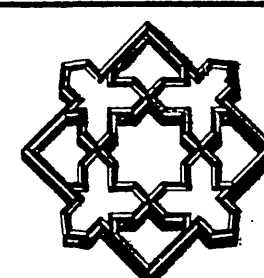
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		<p>DESIGNED BY: V.D. DRAWN BY: J.L.C. CHECKED BY: V.D.</p>		<p>APPROVED BY: [Signature] DATE: 5/29/93</p>		<p>APPROVED BY: [Signature] DATE: 5/29/93</p>		<p>SHEET L-6 OF 17</p>
		<p>REVISIONS</p>		<p>DATE</p>		<p>DATE</p>		<p>HORIZ. SCALE: 1" = VERT. SCALE: 1" =</p>
		<p>MARK</p>		<p>DATE</p>		<p>DATE</p>		<p>INDEXED 6-2-93 4H</p>
		<p>DESIGNED BY: V.D. DRAWN BY: J.L.C. CHECKED BY: V.D.</p>		<p>DATE</p>		<p>DATE</p>		<p>PC-3532-R</p>



- NOTE:
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 27412 Enterprise Circle West, Suite 200
 Temecula, CA 92590 (714) 678-0226
 Job No. 92-033

DESIGNED BY	Y.D.	DRAWN BY	J.L.C.	CHECKED BY	Y.D.
DATE	12/14/92	DATE	12/14/92	DATE	12/14/92
REVISIONS		APPR.		DATE	
MARK					

CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT			
APPROVED BY	DATE	BY	DATE
PRINCIPAL ENGINEER	5/26/93	3	5/25/93
PARK DEPARTMENT			
TRAFFIC DIVISION			
CHIEF P.W. ENGINEER	5/27/93	94.6	5/26/93
APPROVED BY	DATE	BY	DATE
PUBLIC WORKS DIRECTOR	5/28/93		5/28/93

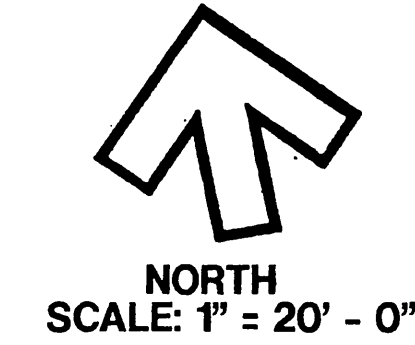
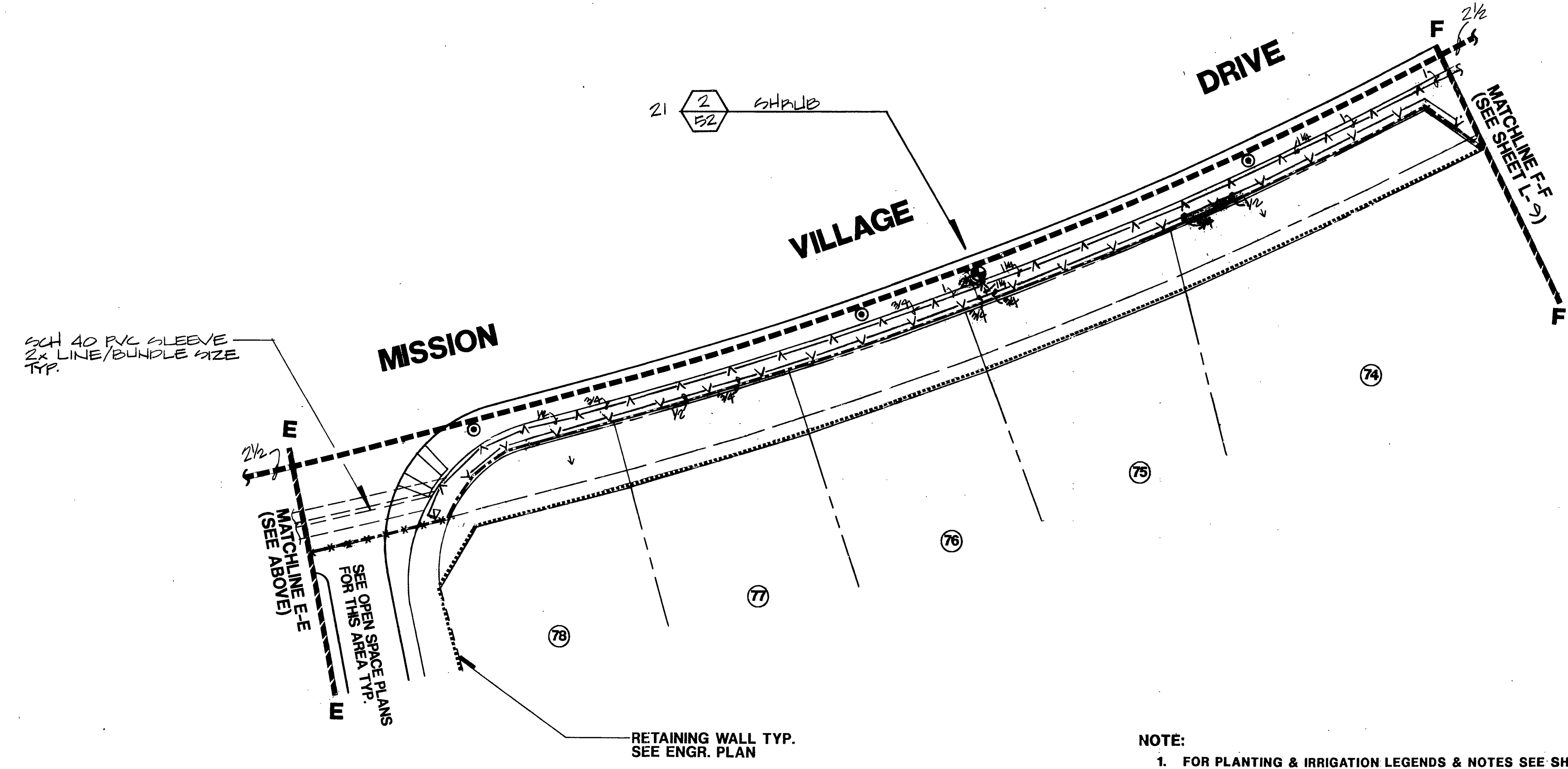
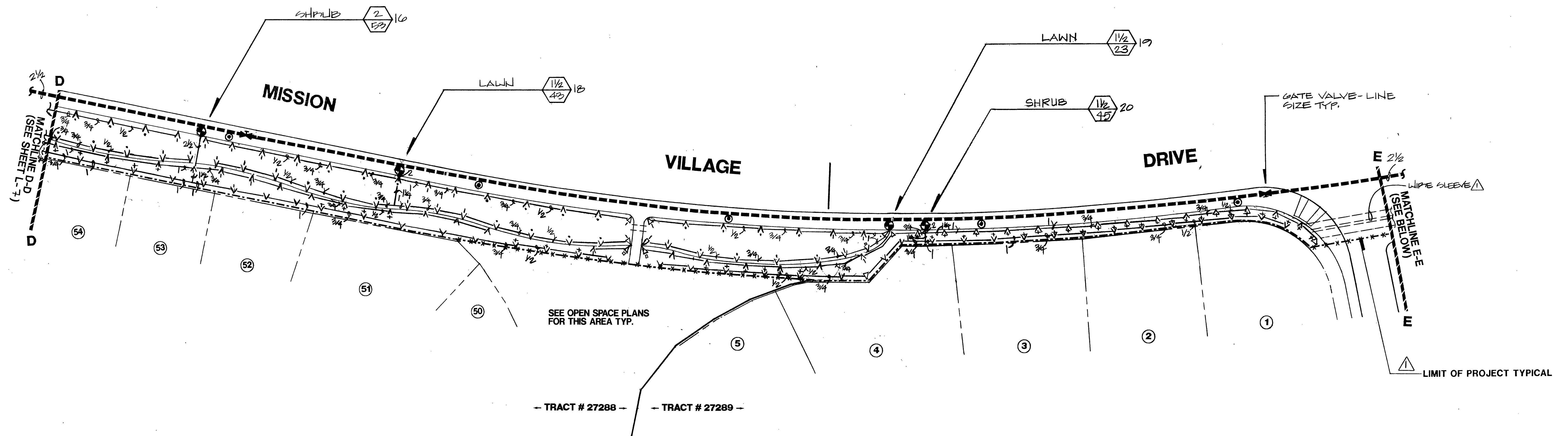
**TRACT # 27289
REVERSE FRONTAGE**

ACCOUNT NO.
 R-3313 L
 SHEET **L-7** OF 17

HORIZ. SCALE: 1" = VERT. SCALE: 1" =

INDEXED 6-2-93 4H

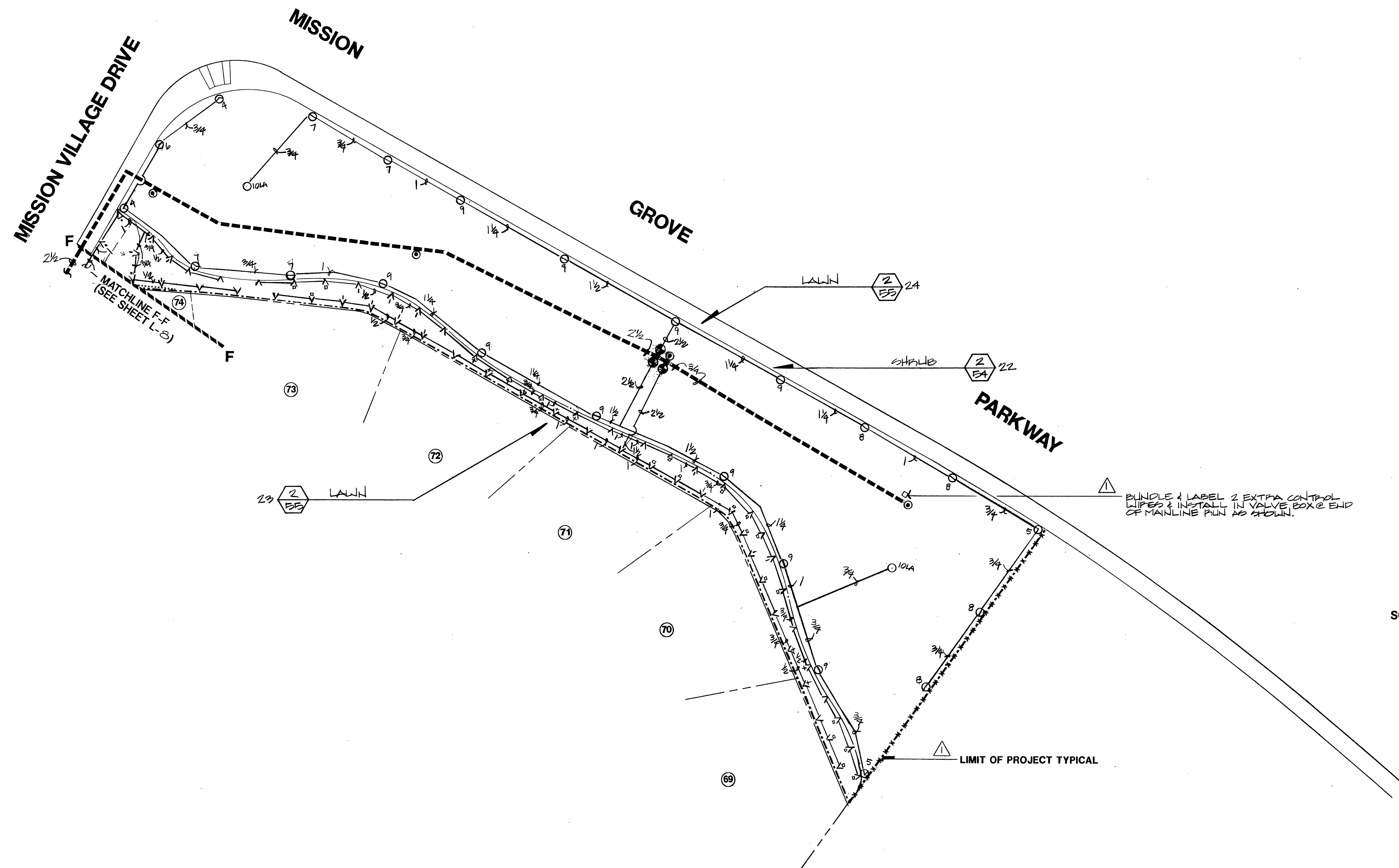
PC 3532-R



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		<p>APPROVED BY DATE BY</p>		<p>APPROVED BY DATE BY</p>		<p>SHEET L-8 OF 17</p>		<p>PC-3532-R</p>
		<p>PRINCIPAL ENGINEER 5/24/93 S</p>		<p>PRINCIPAL ENGINEER 5/24/93 S</p>		<p>TRAFFIC DIVISION 5/24/93 JLC</p>		
		<p>DESIGNED BY V.D. DRAWN BY JLC CHECKED BY V.D.</p>		<p>DATE 5/28/93</p>		<p>HORIZ. SCALE: 1" = VERT. SCALE: 1" =</p>		

INDEXED 6-2-93 4th



IRRIGATION LEGEND

SYMBOL	MANUFACT.	MODEL#	P.S.I.	R.D.	G.P.M.	NOZ.	REMARKS- FOR DETAILS SEE SHEET L-15
	HEADS						
	HUNTER	1-20 ADV-00	50	VARIABLE	VARIABLE	VARIABLE	ADJUSTABLE STREAM ROTOR ON 4" POP-UP (LAWN) (NOZZLE SIZE PER PLAN)
	HUNTER	1-20 36V-00	50	40'	7.3	10LA	FULL CIRCLE STREAM ROTOR ON 4" POP-UP (LAWN) (NOZZLE SIZE PER PLAN)
	RAINBIRD	1800-SRM-15H	30	15'	1.85		HALF CIRCLE SPRAY HEAD ON 4" POP-UP BODY (LAWN 1804) 6" POP-UP (SHRUB 1806)
	RAINBIRD	1800-SRM-15H	30	15'	0.9		QUARTER CIRCLE SPRAY HEAD ON 4" POP-UP BODY (LAWN 1804) 6" POP-UP (SHRUB 1806)
	RAINBIRD	1800-SRM-15VAN	30	15'	0.9		VARIABLE SPRAY HEAD ON 4" POP-UP BODY (LAWN 1804) 6" POP-UP (SHRUB 1806)
	RAINBIRD	1800-SRM-12H	30	12'	1.3		HALF CIRCLE SPRAY HEAD ON 4" POP-UP BODY (LAWN 1804) 6" POP-UP (SHRUB 1806)
	RAINBIRD	1800-SRM-12H	30	12'	.65		QUARTER CIRCLE SPRAY HEAD ON 4" POP-UP BODY (LAWN 1804) 6" POP-UP (SHRUB 1806)
	RAINBIRD	1800-SRM-15Q	30	8'	.09		HALF CIRCLE SPRAY HEAD ON 4" POP-UP BODY (LAWN 1804) 6" POP-UP (SHRUB 1806) PCS-09
	RAINBIRD	1800-SRM-15SST	30	4X30	1.2		SIDE STRIP SPRAY HEAD ON 6" POP-UP BODY (SHRUB 1806)
	RAINBIRD	1800-SRM-15EST	30	4X15	.6		END STRIP SPRAY HEAD ON 6" POP-UP BODY (SHRUB 1806)
	RAINBIRD	1800-SRM-17SST	30	7X14	.9		SIDE STRIP SPRAY HEAD ON 6" POP-UP BODY (SHRUB 1806) W/ PCS-090 SCREEN
	EQUIPMENT						
	RAINBIRD	ISC-24					24 STATION IRRIGATION CONTROLLER-INSTALL IN LEMUR ENCLOSURE AS SHOWN BY 115V ELECTRICAL OUTLET
	WCS	RGVR					RAIN GUARD WITH VANDAL RESISTANT ENCLOSURE -MOUNT ON SOUTH FACING SIDE OF CONTROLLER ENCLOSURE FREE OF OBSTRUCTIONS
	WILKINS	600HR					PRESSURE REGULATOR-SAME SIZE AS B.P.U., REFER TO DETAIL 2, SHEET L-15 (REGULATE TO 85 P.S.I.)
	RAINBIRD	150/200 EFB-CP					1 1/2" & 2" REMOTE CONTROL VALVES.
	RAINBIRD	44LRC					QUICK COUPLING VALVE <SEE DETAIL 4050 SHEET L-15>
	NIBCO	TI-113					GATE VALVE LINE SIZE - TYP.
	FINN OR EQUAL	CLASS 200					NON PRESSURE LATERAL LINE-INSTALL 18" MIN COVER
	FINN OR EQUAL	SCH 40					PRESSURE TYPE MAINLINE-INSTALL 18" MIN COVER
	FINN OR EQUAL	SCH 40					TYPICAL PVC SLEEVE TWO TIMES DIAMETER OF PIPE

1/2" 4" REMOTE CONTROL VALVE SIZE
VALVE SEQUENCE NUMBER
GALLONS PER MINUTE

PLANTING LEGEND

ABBR.	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	MIN.H.T.	MIN.SPR.	MIN.CRL.	REMARKS-FOR DETAILS SEE SHEET L-15
TREES								
CIN. CAM.	CINNAMONUM CAMPHORA	CAMPHOR TREE	15 GAL.	40	2-9'	3-4'		DOUBLE STRIKE W/ SHAWTOWN IND. MODEL FI-15 "ROOT BOOSTER" TYP.
EUC. NIC.	EUCALYPTUS NICHOLI	PEPPERMINT GUM	15 GAL.	60	7-9'	2-3'		DOUBLE STRIKE
LAG. IND.	LAGERSTROEMIA INDICA	CREPE MYRTLE	24" BOX	92	6-7'	2-3'		DOUBLE STRIKE (COLOR PER PLAN-COLOR DIFFERENT EACH ENTRY)
PIN. ELD.	PINUS ELDERICA	MONDELL PINE	15 GAL.	25	7-9'	3-4'		DOUBLE STRIKE
ROB. A. 'I.'	ROBINIA AMBIGUA 'IDAHOENSIS'	PINK FLOWERING LOCUST	15 GAL.	50	7-9'	3-4'		DOUBLE STRIKE
WRS. ROB.	WASHINGTON ROBUSTA	MEXICAN FAN PALM	5/8" CL. 15"	7/8	8/8"			
SHRUBS								
AGR. AFR.	AGAPANTHUS AFRICANUS 'QUEEN ANNE'	LILY-OF-THE-NILE	1 GAL.	114				FULL AND BUSHY
CER. CON.	CERANTHUS CONCHA	CONCHA	5 GAL.	140				FULL AND BUSHY
ESC. FRA.	ESCALLONIA X 'TERRI'	COMPACT ESCALLONIA	5 GAL.	107				FULL AND BUSHY
HEM. HYB.	HEMEROCALLIS HYBRIDS	DRY LILY	1 GAL.	265				FULL AND BUSHY
PHO. FRA.	PHOTINIA FRASERI	FRASER'S PHOTINIA	5 GAL.	111				FULL AND BUSHY
RIP. IND.	RAPHIOLEPS INDICA 'JACK EVANS'	JACK EVANS RHATHORN	5 GAL.	149				FULL AND BUSHY
PIT. T.W.	PITTIOSPORUM TOBIRA 'WHEELERS DWARF'	WHEELERS DWARF TOBIRA	5 GAL.	164				FULL AND BUSHY
PAR. TRI.	PARTHENOCISSUS TRICUSPATA	BOSTON IVY	5 GAL.	60				ATTACH TO WALL PER DETAIL
GROUND COVER								
MYO. PAR.	MYOPORIUM PARVIFOLIUM PINK	PINK MYOPORIUM	FLATS	12" O.C.				PLANT TRIANGULAR SPACING
ROS. O. 'L.D.'	ROSMARINUS OFFICINALIS 'LOCKWOOD DE FOREST'	DWARF ROSEMARY	FLATS	18" O.C.				PLANT TRIANGULAR SPACING
TURF	SEE PLANTING SPECIFICATIONS ITEM 2.03-SEED FOR SEED MIX.							

NOTE:
INSTALL "ROOT BOOSTER" FOR CINNAMONUM CAMPHORA PER MANUFACTURER REQUIREMENT (TYP.)

IRRIGATION NOTES

- IRRIGATION SYSTEM IS SHOWN DIAGRAMMATICALLY. LOCATE ALL PIPE AND EQUIPMENT WITHIN PLANTING AREAS WHEREVER POSSIBLE.
- ALL LATERAL END RUNS ARE TO BE 1/2" P.V.C., CLASS 315 UNLESS NOTED OTHERWISE.
- LOCATE PRESSURE LINES WITHIN 18" OF EDGE OF HARDSCAPE IN PLANTING AREAS.
- ADJUST ALL HEADS TO AVOID OVERTHROW ONTO WALLS, WALKS, AND WINDOWS. ADJUST ANGLE OF RISERS FOR HEADS ON SLOPES FOR MAXIMUM THROW. REDUCE RADIUS WITH ADJUSTING SCREW FOR UNIFORM COVERAGE AND MINIMUM OVERTHROW OF AREA.
- TREE LOCATIONS TAKE PRECEDENCE OVER IRRIGATION PIPING. STAKE TREE LOCATIONS PRIOR TO TRENCHING PIPE.
- CONTRACTOR SHALL ARRANGE AND PAY FOR ALL NECESSARY CONNECTIONS FOR 115 V. A.C. ELECTRICAL SERVICE TO IRRIGATION CONTROLLER.
- CONTRACTOR SHALL ADJUST HUNTER NOZZLE SIZES TO COMPENSATE FOR ADJUSTABLE ARCS. EXAMPLE: INSTALL #3 NOZZLE FOR 90 AREA; INSTALL #4 NOZZLE FOR 110 AREA.
- CONTRACTOR SHALL CAREFULLY INSPECT THE SITE AND VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO PROCEEDING WITH ANY WORK. TO ALLOW FOR ADEQUATE IRRIGATION COVERAGE AS SHOWN ON PLAN, CONTRACTOR SHALL ADJUST AND ADJUST HEADS TO COMPENSATE FOR ANY CHANGES IN AREA.
- TO ENSURE PROPER LOCATION OF IRRIGATION SLEEVE INSTALLATION CONTRACTOR SHALL COORDINATE LOCATION OF MAINLINE, LATERAL AND CONTROL WIRES WITH ALL OTHER RELATED TRADES AS REQUIRED.
- ALL BRASS FITTINGS TO BE RED BRASS TYPICAL.
- USE 3/4" TEFLON TAPE ON ALL METAL THREADED CONNECTIONS.
- IRRIGATION SYSTEMS DESIGNED FROM A STATIC WATER PRESSURE OF 104 P.S.I. & 1578 ELEVATION. INFORMATION WAS OBTAINED FROM CLARICE & WESTERN MUNICIPAL WATER DISTRICT REGULATE TO 85 P.S.I. CONTRACTOR SHALL VERIFY WATER PRESSURE AT WORSE CONDITION AND CONTACT LANDSCAPE ARCHITECT IF ANY INCONSISTENCIES OCCUR.
- CONTROL WIRE SCHEDULE: (MAX. LENGTH OF RUNS)

CONTROL/COMMON	NO. 12	NO. 10	NO. 8
NO. 14	2000'	2400'	2700'
NO. 12	2700'	3300'	3800'
NO. 10		4300'	5200'
NO. 8			6700'

- ABOVE WIRING SCHEDULE IS BASED ON THE USE OF A 24 VOLT AUTOMATIC IRRIGATION CONTROLLER.
- WIRE SIZE IS BASED ON OPERATING ONE VALVE AT A TIME.
- ALL IRRIGATION SHALL CONFORM TO THE CITY OF RIVERSIDE STANDARDS AND SPECIFICATIONS.
- SEE SHEET L-15 FOR DETAILS & L-16 & L-17 FOR SPECIFICATIONS.

PLANTING NOTES

- CONTRACTOR SHALL APPLY "ROUND UP" HERBICIDE ON ALL PLANTING AREAS PRIOR TO PLANTING AS PER MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR SHALL APPLY "RON STAR" PRE-EMERGENT HERBICIDE AT 3 lbs. PER 1000 S.F. AFTER PLANTING AS PER MANUFACTURER'S RECOMMENDATIONS. (ONLY ON NON-SEED AREAS)
- ALL PLANTING SHALL CONFORM TO THE CITY OF RIVERSIDE STANDARDS AND SPECIFICATIONS.
- SOIL TESTING:
CONTRACTOR SHALL PROVIDE A HORTICULTURAL SOILS ANALYSIS PERFORMED BY A LABORATORY OF THE CALIFORNIA DEPARTMENT OF AGRICULTURE. CONTRACTOR SHALL PROVIDE SOIL AMENDMENT RECOMMENDATIONS TO CONFORM TO SOIL ANALYSIS RESULTS AS REQUIRED.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE OF ALL PLANTING AREAS ON SITE AND SUBSURFACE DRAINAGE FOR ENCLOSED PLANTING AREAS.
- THE CONTRACTOR SHALL CAREFULLY INSPECT THE SITE AND VERIFY ALL THE CONDITIONS AND DIMENSIONS PRIOR TO PROCEEDING WITH ANY WORK. NOTIFY LANDSCAPE ARCHITECT AND PARK PROJECTS INSPECTOR AND OWNER IF ANY INCONSISTENCIES OCCUR.
- THE CONTRACTOR SHALL REMOVE ALL WEEDS, ROCKS, DEBRIS AND OTHER EXTRANEOUS MATERIALS FROM THE JOB SITE PRIOR TO PROCEEDING WITH ANY WORK.
- ALL PLANT MATERIALS SHALL BE HANDLED OR STORED SO THAT THEY ARE ADEQUATELY PROTECTED FROM DRYING OUT, FROM SUN OR WIND BURN, OR FROM ANY OTHER INJURY.
- THE CONTRACTOR SHALL INCORPORATE IN ALL SHRUB PLANTING AREAS (EXCEPT SLOPES) A 1" LAYER OF MEDIUM GRIND "SHREDDED" CLEAN GROUND FIR OR PINE BARK MULCH (WEED AND WEEDSEED FREE). CONTRACTOR SHALL PROVIDE LANDSCAPE ARCHITECT AND PARK PROJECTS INSPECTOR WITH SAMPLE FOR APPROVAL PRIOR TO INSTALLATION.
- CONTRACTOR TO VERIFY ALL PLANT QUANTITIES SHOWN ON PLANS.
- THE LANDSCAPE ARCHITECT SHALL CERTIFY THAT HYDROSEEDED AREAS HAVE ACHIEVED EVEN GERMINATION (UNEVENLY GERMINATED AREAS SHALL BE RESEED UNTIL EVEN GERMINATION HAS BEEN ACHIEVED). CERTIFICATION SHALL ALSO CONTAIN A STATEMENT AS TO THE GROWING STOCK VIABILITY.
- SEE SHEET L-15 FOR DETAILS, L-16 & L-17 FOR SPECIFICATIONS.

COVERED BY PARK PROJECTS INSPECTOR STREET TREE NOTES

CITY OF RIVERSIDE GENERAL NOTES FOR:
STREET TREE PLANTING AND RELOCATION

GENERAL NOTES FOR STREET TREE PLANTING AND RELOCATION

- All related work shall conform to the City of Riverside, Park and Recreation Department standards and the City of Riverside Street Tree policies.
- When calling for inspections, contact the Street Tree Inspector a minimum of 48 hours in advance at (714) 351-6126 to schedule an inspection. A Field Notice will be issued as written approval for each stage of inspection. A verbal approval will not be acceptable. Inspections will be required:
 - After completion of final grading of the and when all utility services and sewer laterals have been marked, but prior to digging plant pits, all final street tree locations are to be spotted in the field by the street tree inspector.
 - While digging plant pits and planting/relocating trees.
 - After planting and all other indicated of specified work has been completed for start of maintenance.
 - At end of maintenance period, the contractor/developer shall call the Street Tree Inspector at (714) 351-6126 for a final acceptance inspection in order to be released from maintenance. Developers bonds will not be released until after receipt of written notification from the City that the trees pass final inspection and the Park and Recreation Department is assuming maintenance responsibilities.
- ALL STREET TREES ARE TO BE PLANTED PRIOR TO OCCUPANCY.
- The developer shall be responsible to acceptably maintain all plantings for a minimum of one (1) year.
- Street Tree planting shall be as follows:

Street Name	Botanical Name/ Common Name	Min Size	Approx. No. Spacing Req.
a. Trautwein Rd.	Pinus Eldarica Mondell Pine	15 Gal.	45' 18
b. Mission Village Dr.	Cinnamomum Camphora Camphor Tree	15 Gal.	45' 31
c. Mission Grove Parkway	Washingtonia robusta Mexican Fan Palm	4' brn trunk	45' 7

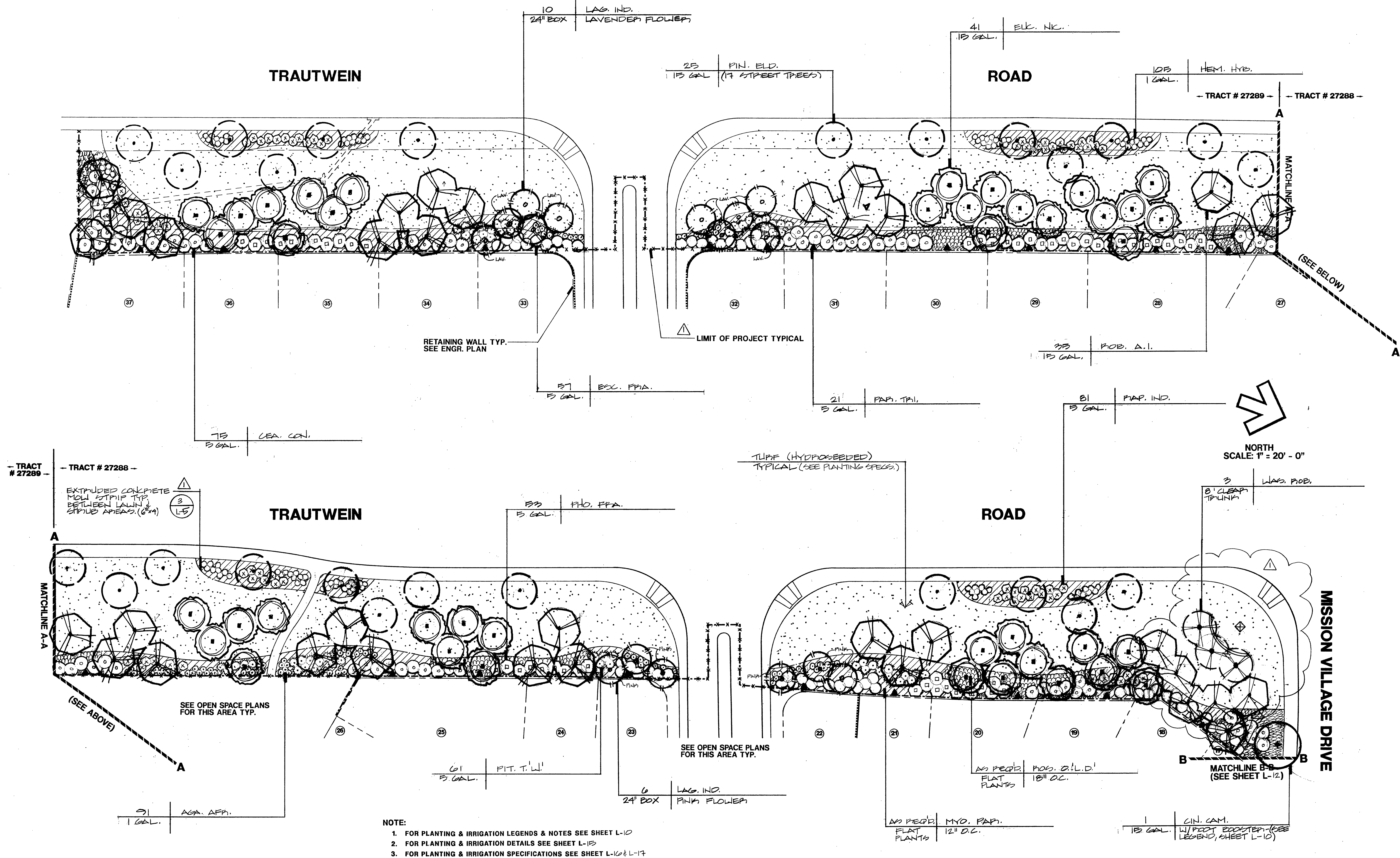
(6) Both a Street Tree relocation/Removal Permit as issued by the Park and Recreation Department, and a Street opening Permit as issued by the Public Works Department are required prior to commencement of tree relocation and/or removal work. For all existing trees within what will ultimately be the Public Right-of-Way pavement area. Backfill of all holes is to be inspected by the Public Works Inspector for proper compaction.

(7) All street trees must be automatically irrigated, except where adjacent to single family or duplex or residential uses.

(8) In the interest of public safety and maintenance, the Street Tree Inspector shall have the authority to revise street tree quantities and locations shown on approved plans based upon field conditions found at the time of installation of the trees.

All designs and ideas represented hereon are the property of Alhambra Group, Landscape Architects, and are to be used on this project only. They shall not be used otherwise without the written permission of said Landscape Architects. Any changes made by parties other than said Landscape Architects shall relieve Landscape Architects of responsibility for the project or effected portion thereof.	ALHAMBRA GROUP LANDSCAPE ARCHITECTURE CA Lic. #15659 CA Lic. #2017 RECREATION FACILITIES PLANNING 27412 Enterprise Circle West, Suite 200 Temecula, CA 92590 (714) 676-0226 Job No. 92-033	PER CITY REG. J.C. 10/4/92	CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT APPROVED BY: [Signature] DATE: 5/28/93 PUBLIC WORKS DIRECTOR	ACCOUNT NO. R-3313 L SHEET L-10 OF 17
		DESIGNED BY: JLC DRAWN BY: JLC CHECKED BY: VPD	REVISIONS APRR. DATE	TRAFFIC DIVISION CHIEF P.W. ENGINEER DATE: 5/28/93

INDEXED 6-293 4H



ALHAMBRA GROUP
LANDSCAPE ARCHITECTURE
 CA Lic. #1559 CA Lic. #2017
RECREATION FACILITIES PLANNING
 27412 Enterprise Circle West, Suite 200
 Temecula, CA 92590 (714) 678-0226
 Job No. 92-033

APPROVED BY	DATE	BY
PRINCIPAL ENGINEER	5/24/92	V.L.
PARK DEPARTMENT	5/25/92	V.L.
TRAFFIC DIVISION	5/26/92	V.L.
CHIEF P.W. ENGINEER	5/26/92	V.L.

DESIGNED BY: B.G. DRAWN BY: J.L.C. CHECKED BY: V.D.

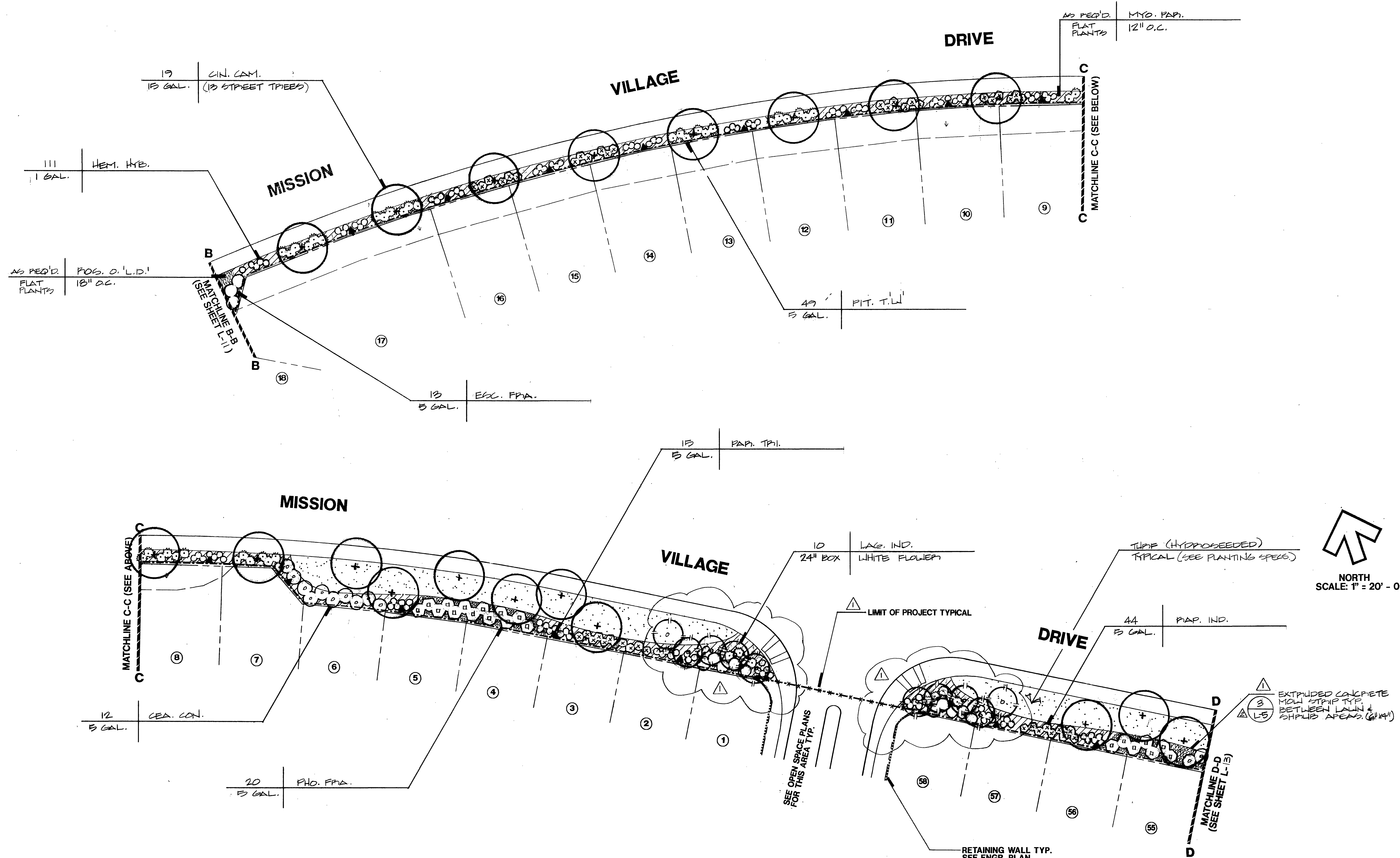
CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY: *[Signature]*
 PUBLIC WORKS DIRECTOR
 DATE: 5/26/92

TRACT # 27288 & 27289
REVERSE FRONTAGE
PLANTING PLAN

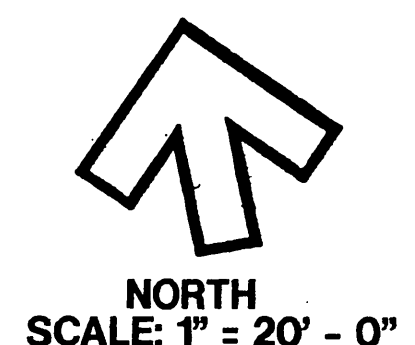
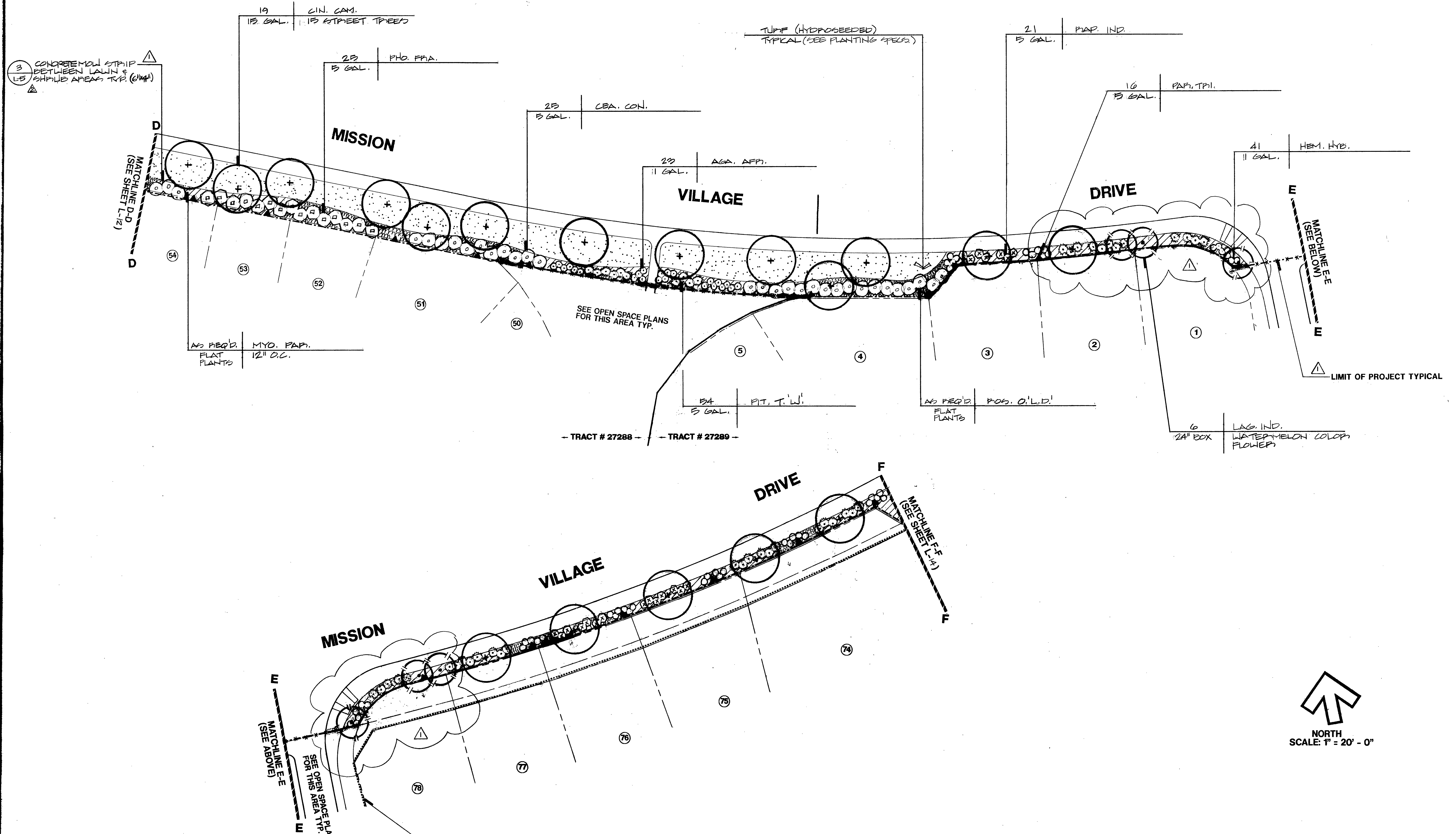
HORIZ. SCALE: 1" = VERT. SCALE: 1" =

ACCOUNT NO.
 R-3313 L
 SHEET **L-11** OF 17



- NOTE:
1. FOR PLANTING & IRRIGATION LEGENDS & NOTES SEE SHEET L-10
 2. FOR PLANTING & IRRIGATION DETAILS SEE SHEET L-15
 3. FOR PLANTING & IRRIGATION SPECIFICATIONS SEE SHEET L-16 & L-17

<p>All designs and ideas represented hereon are the property of Alhambra Group, Landscape Architects, and are to be used on this project only. They shall not be used otherwise without the written permission of said Landscape Architects. Any changes made by parties other than said Landscape Architects shall relieve Landscape Architects of responsibility for the project or affected portion thereof.</p>	<p>ALHAMBRA GROUP LANDSCAPE ARCHITECTURE CA Lic. #15569 CA Lic. #2017 RECREATION FACILITIES PLANNING 27412 Enterprise Circle West, Suite 200 Temecula, CA 92590 (714) 676-0226 Job No. 92-033</p>	PER CITY REQ. PER CITY REQ.	J.C. 10/4/92 V.D. 11/28/92	CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT		TRACT # 27288 REVERSE FRONTAGE PLANTING PLAN	ACCOUNT NO. R-3313 L SHEET L-12 OF 17
		APPROVED BY PRINCIPAL ENGINEER PARK DEPARTMENT TRAFFIC DIVISION CHIEF P.W. ENGINEER		APPROVED BY PUBLIC WORKS DIRECTOR			
		DESIGNED BY: BO DRAWN BY: JLC CHECKED BY: VD		DATE: 5/28/93			
		HORIZ. SCALE: 1" =		VERT. SCALE: 1" =			



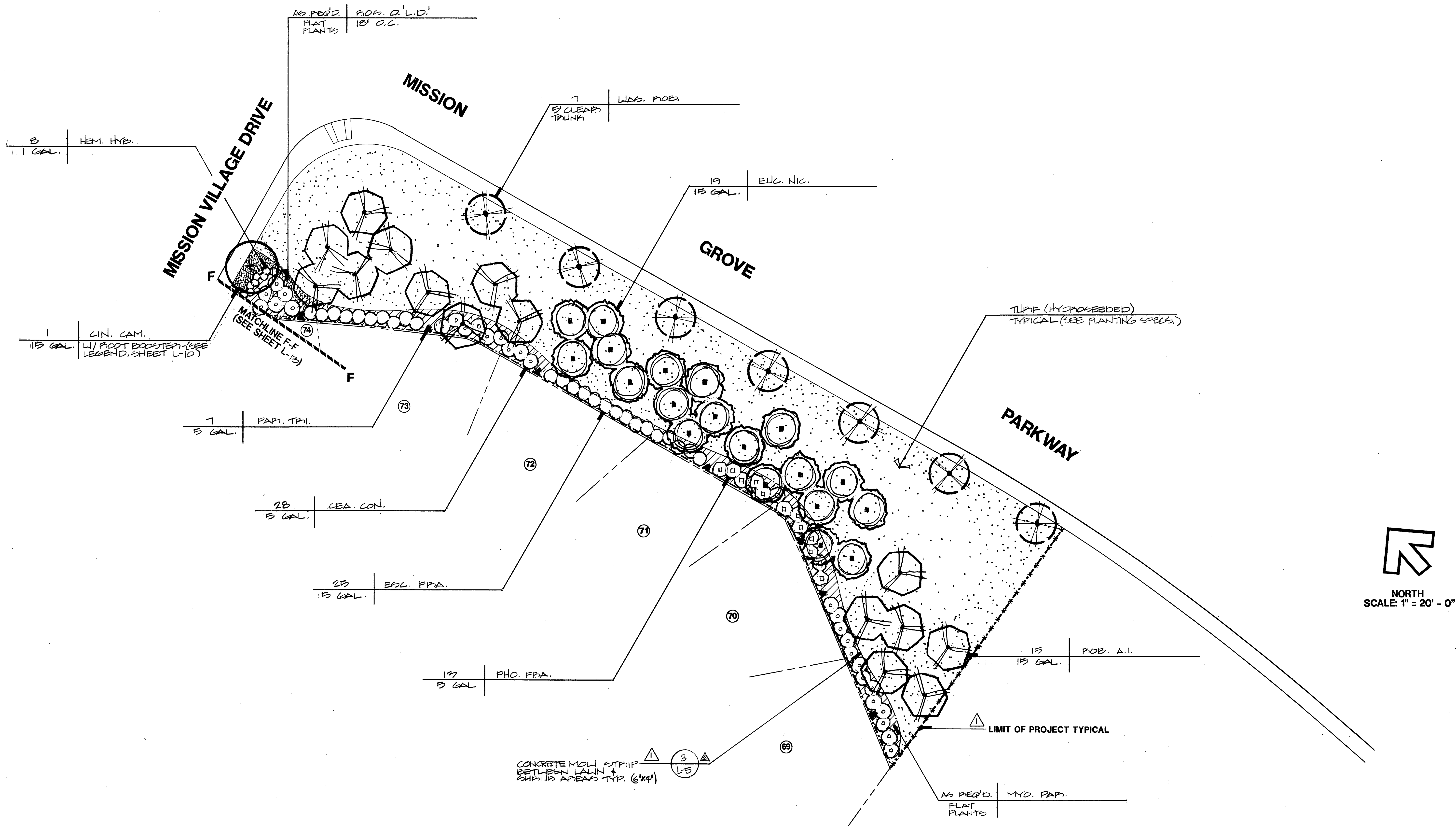
NORTH
SCALE: 1" = 20' - 0"

- NOTE:
1. FOR PLANTING & IRRIGATION LEGENDS & NOTES SEE SHEET L-10
 2. FOR PLANTING & IRRIGATION DETAILS SEE SHEET L-15
 3. FOR PLANTING & IRRIGATION SPECIFICATIONS SEE SHEET L-16 & L-17

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		<p>APPROVED BY: [Signature] DATE: 5/26/93</p> <p>PRINCIPAL ENGINEER</p>	<p>APPROVED BY: [Signature] DATE: 5/26/93</p> <p>PUBLIC WORKS DIRECTOR</p>			
		<p>TRAFFIC DIVISION</p> <p>CHIEF P.W. ENGINEER</p>	<p>DATE: 5/26/93</p>			
		<p>HORIZ. SCALE: 1" = VERT. SCALE: 1" =</p>				

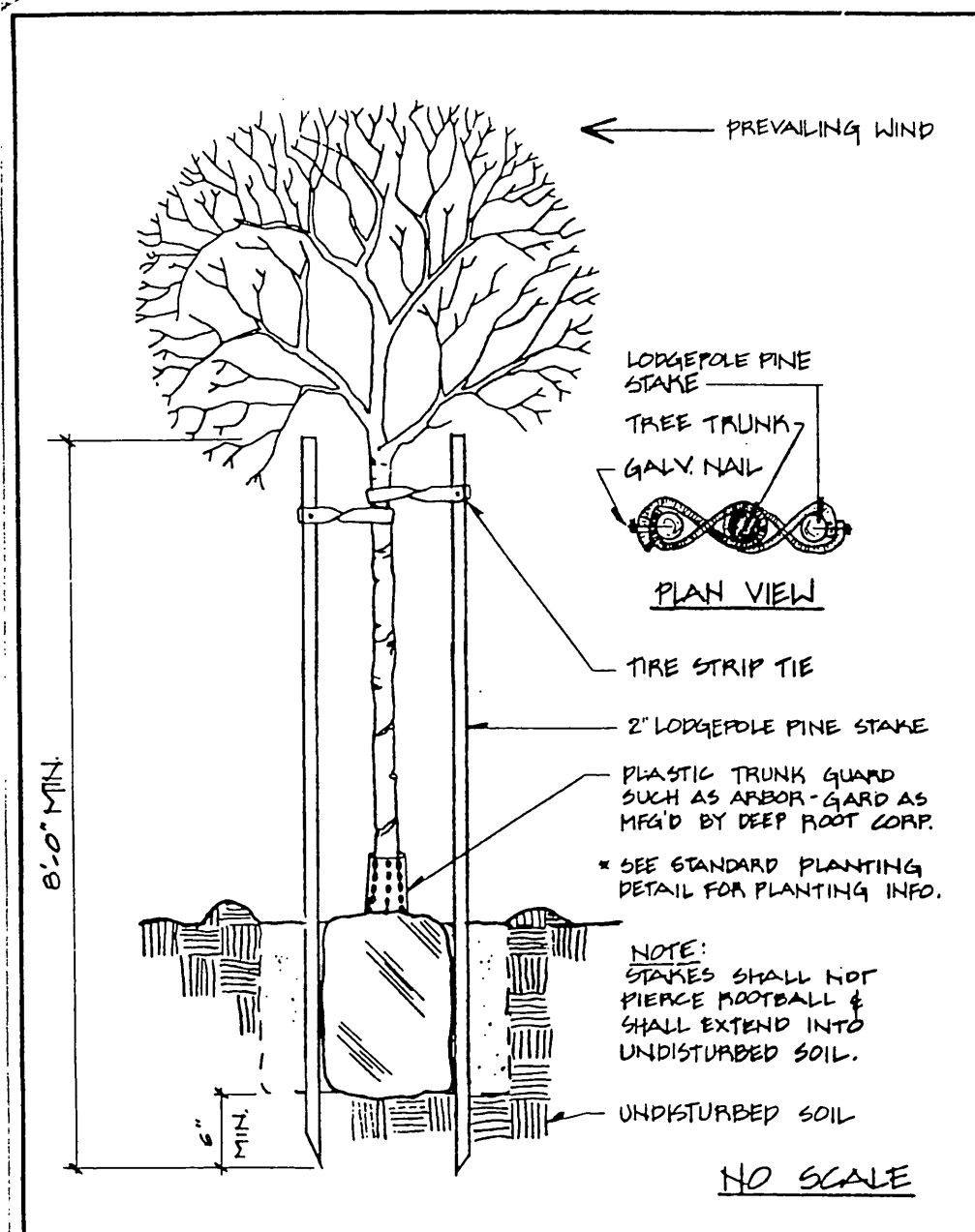
DESIGNED BY: [Signature] DRAWN BY: [Signature] CHECKED BY: [Signature]

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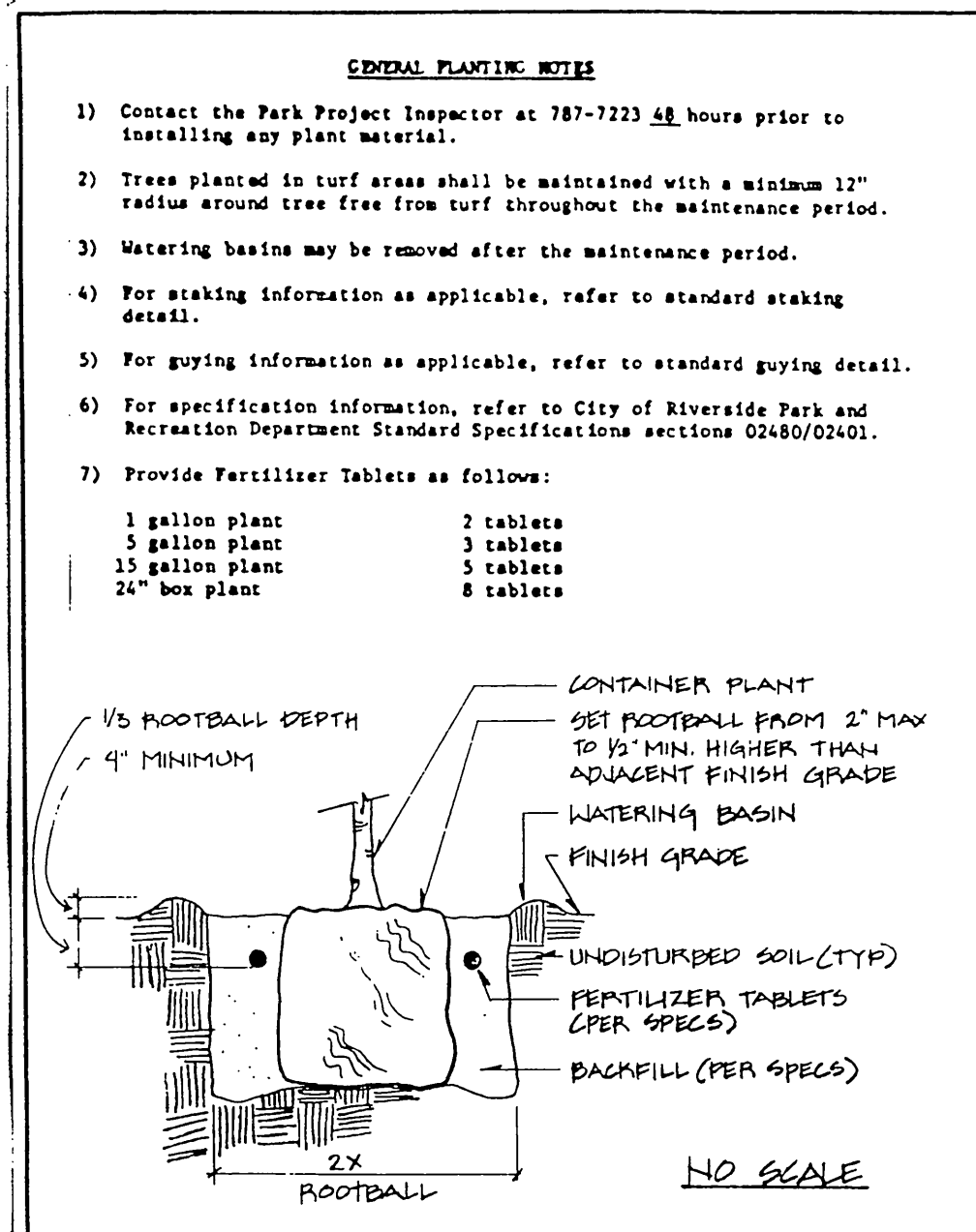


- NOTE:
1. FOR PLANTING & IRRIGATION LEGENDS & NOTES SEE SHEET L-10
 2. FOR PLANTING & IRRIGATION DETAILS SEE SHEET L-15
 3. FOR PLANTING & IRRIGATION SPECIFICATIONS SEE SHEET L-16 & L-17

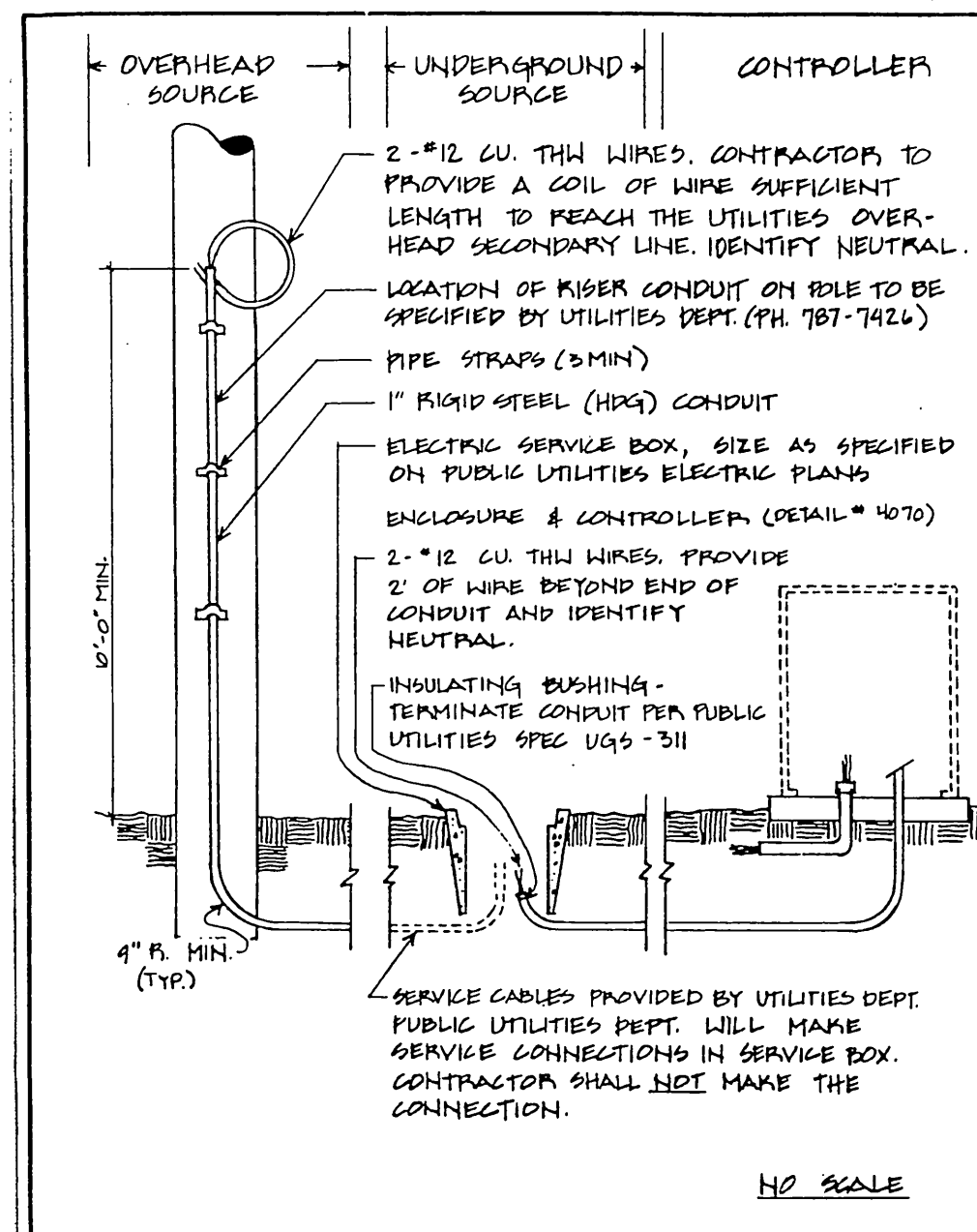
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		<p>REVISIONS</p>	<p>DATE</p>	<p>DATE</p>	<p>DATE</p>	<p>HORIZ. SCALE: 1" = VERT. SCALE: 1" =</p>



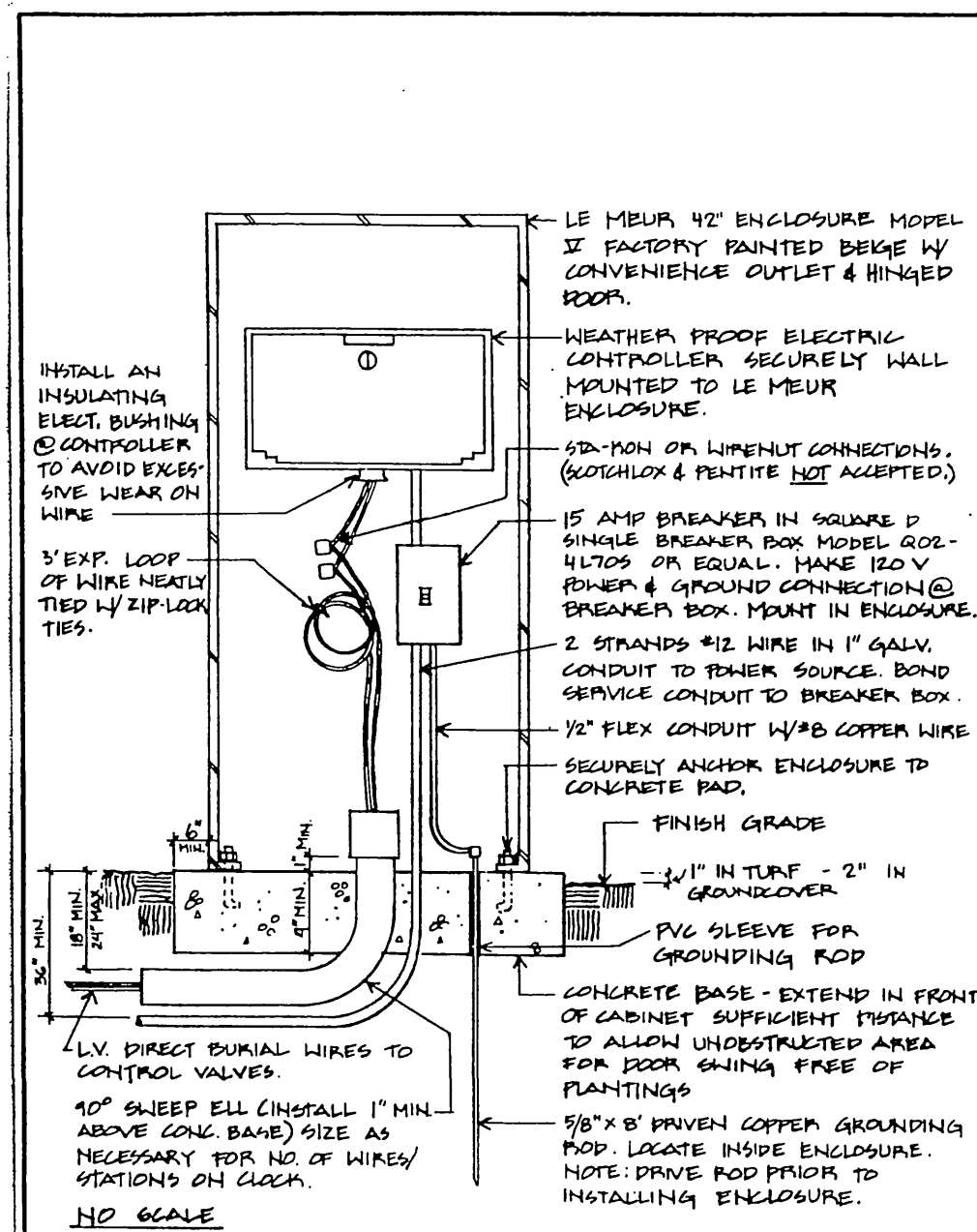
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 Revised: *[Signature]* Date: 10/2/93
 Park & Recreation Department
 CITY OF RIVERSIDE
 DOUBLE STAKING DETAIL
 Detail No. 1002



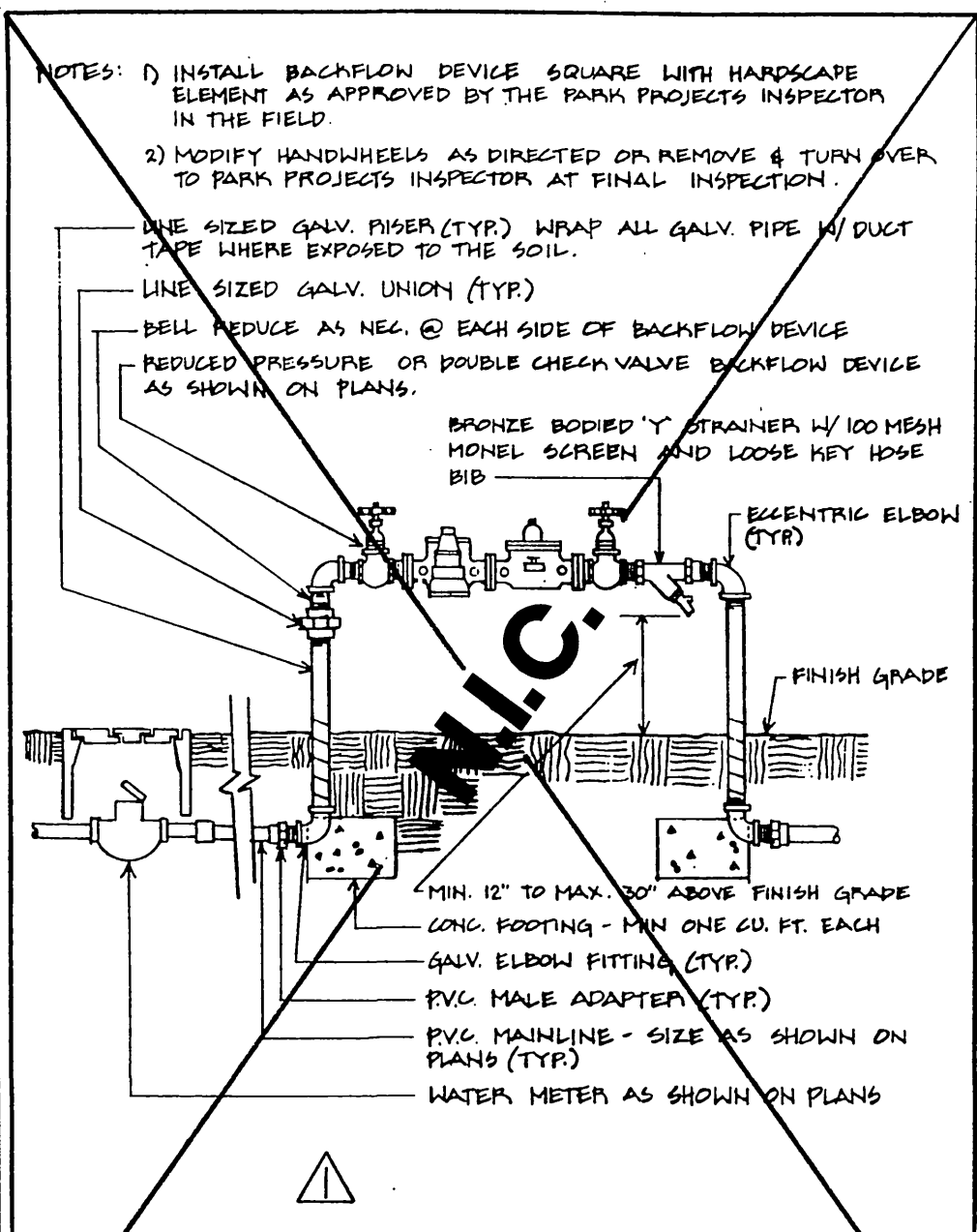
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 CITY OF RIVERSIDE
 PLANTING DETAIL
 Detail No. 1001



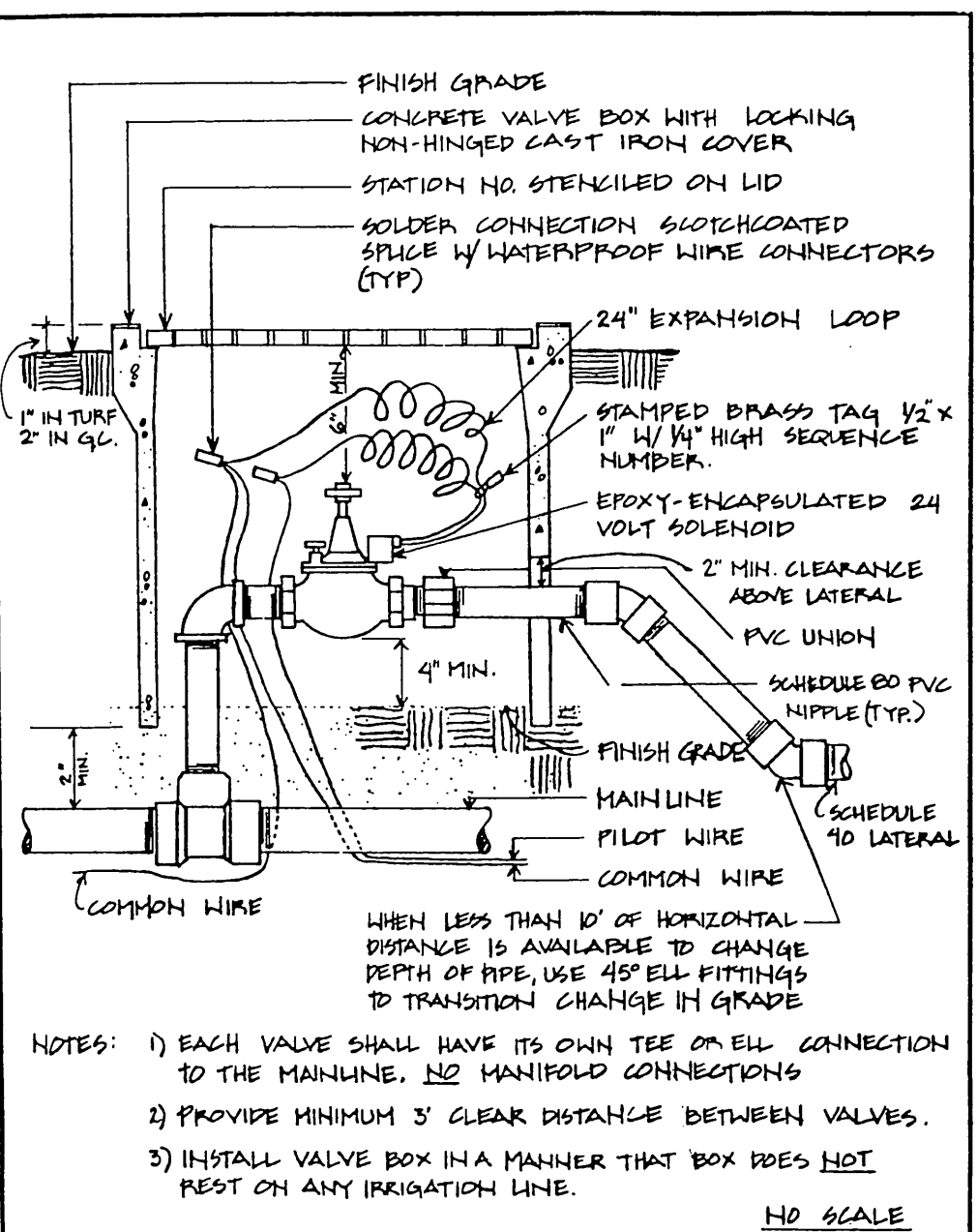
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 CITY OF RIVERSIDE
 UTILITY SERVICE
 Detail No. 4060



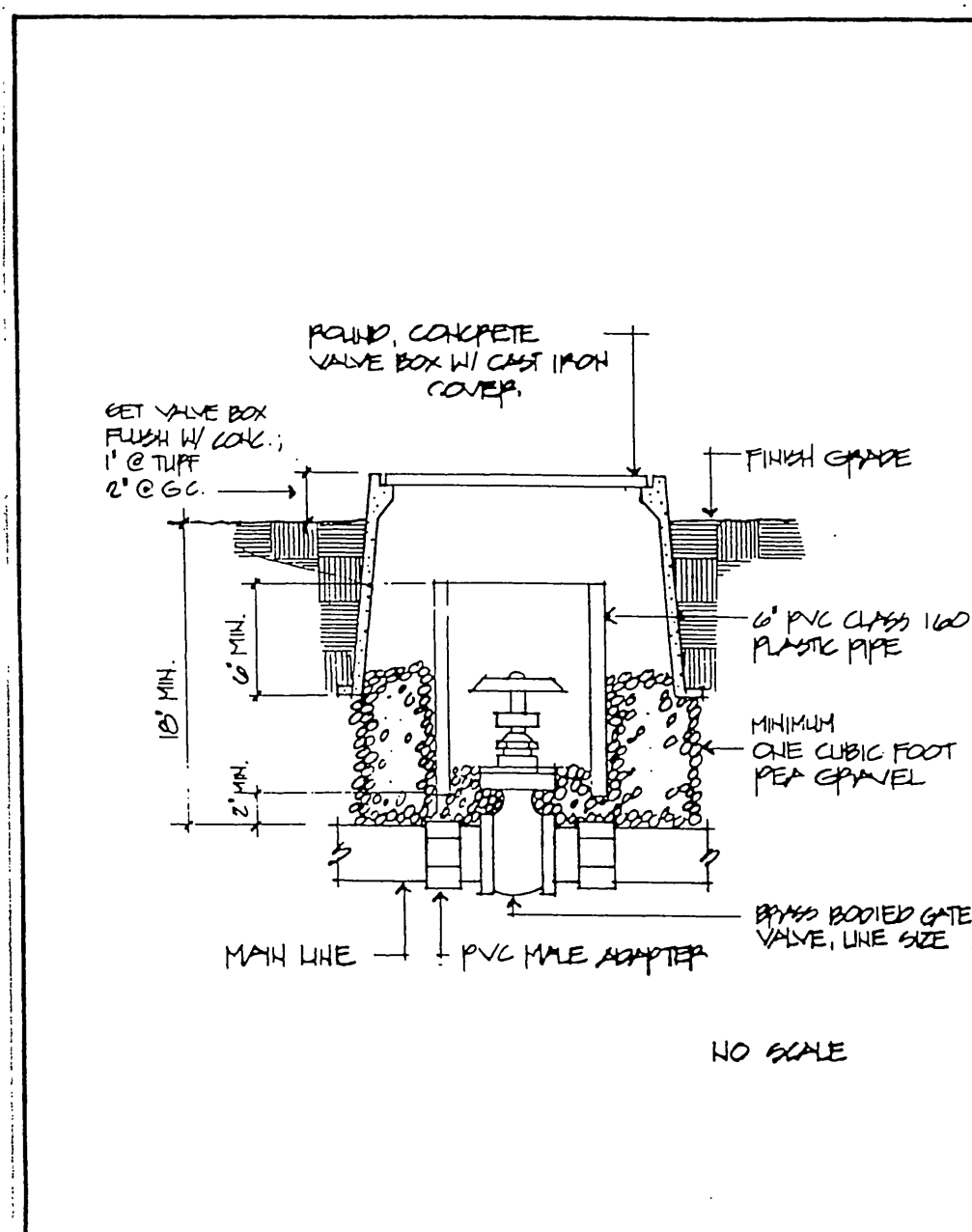
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 Park & Recreation Department
 CITY OF RIVERSIDE
 CONTROLLER
 Detail No. 4070



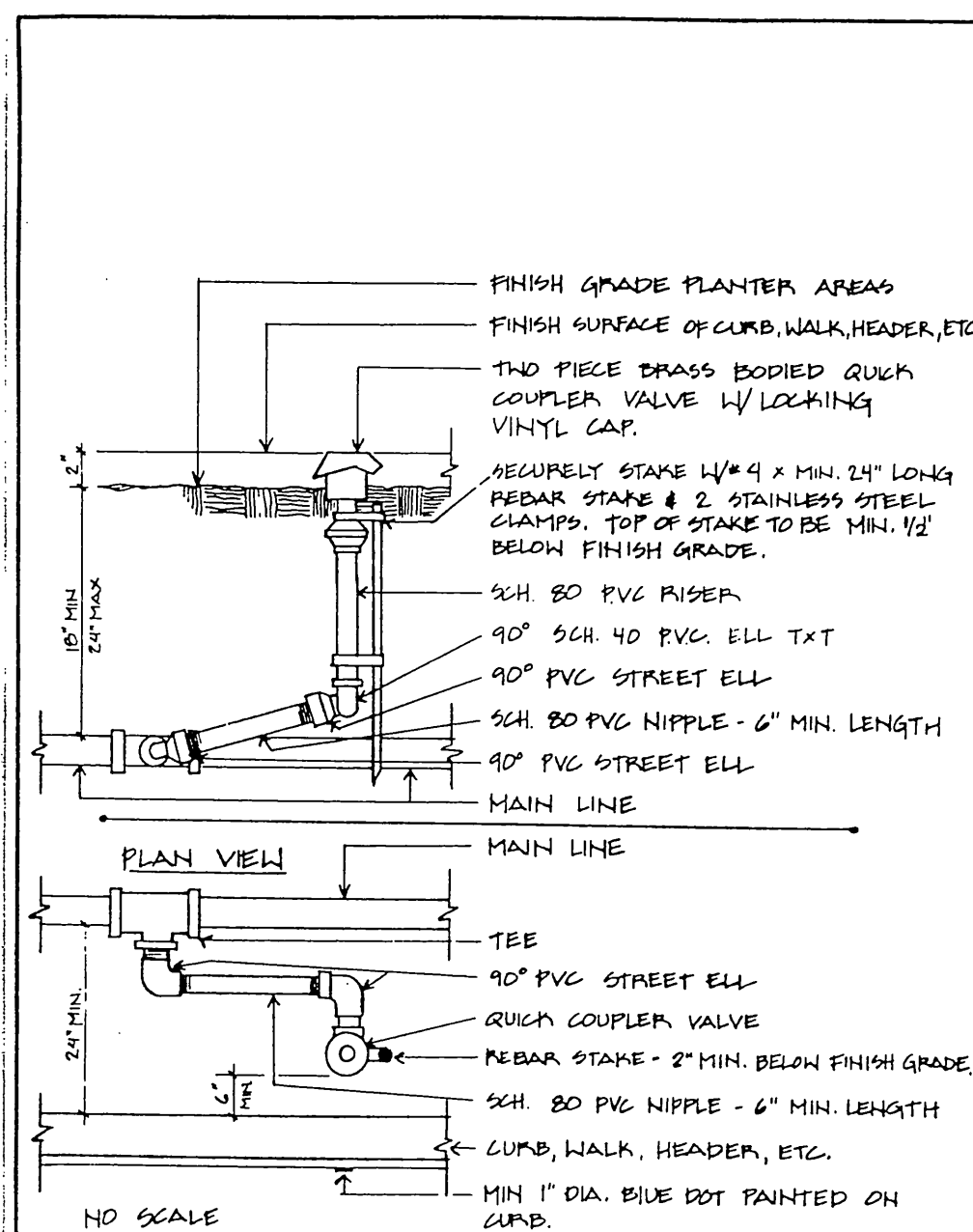
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 Park & Recreation Department
 CITY OF RIVERSIDE
 REDUCED PRESSURE/DOUBLE CHECK VALVE BACKFLOW DEVICE
 Detail No. 4080



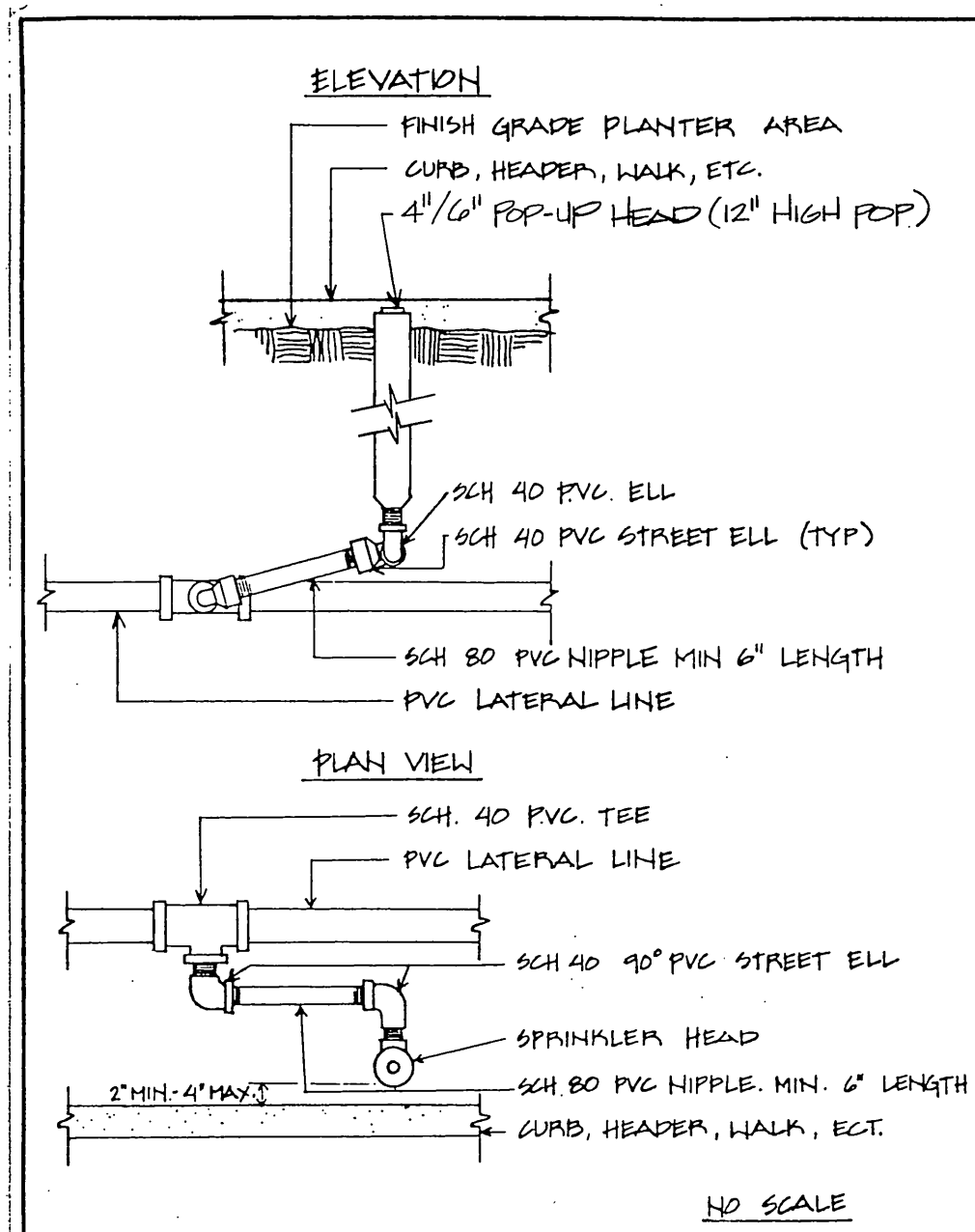
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 CITY OF RIVERSIDE
 AUTOMATIC VALVE
 Detail No. 4030



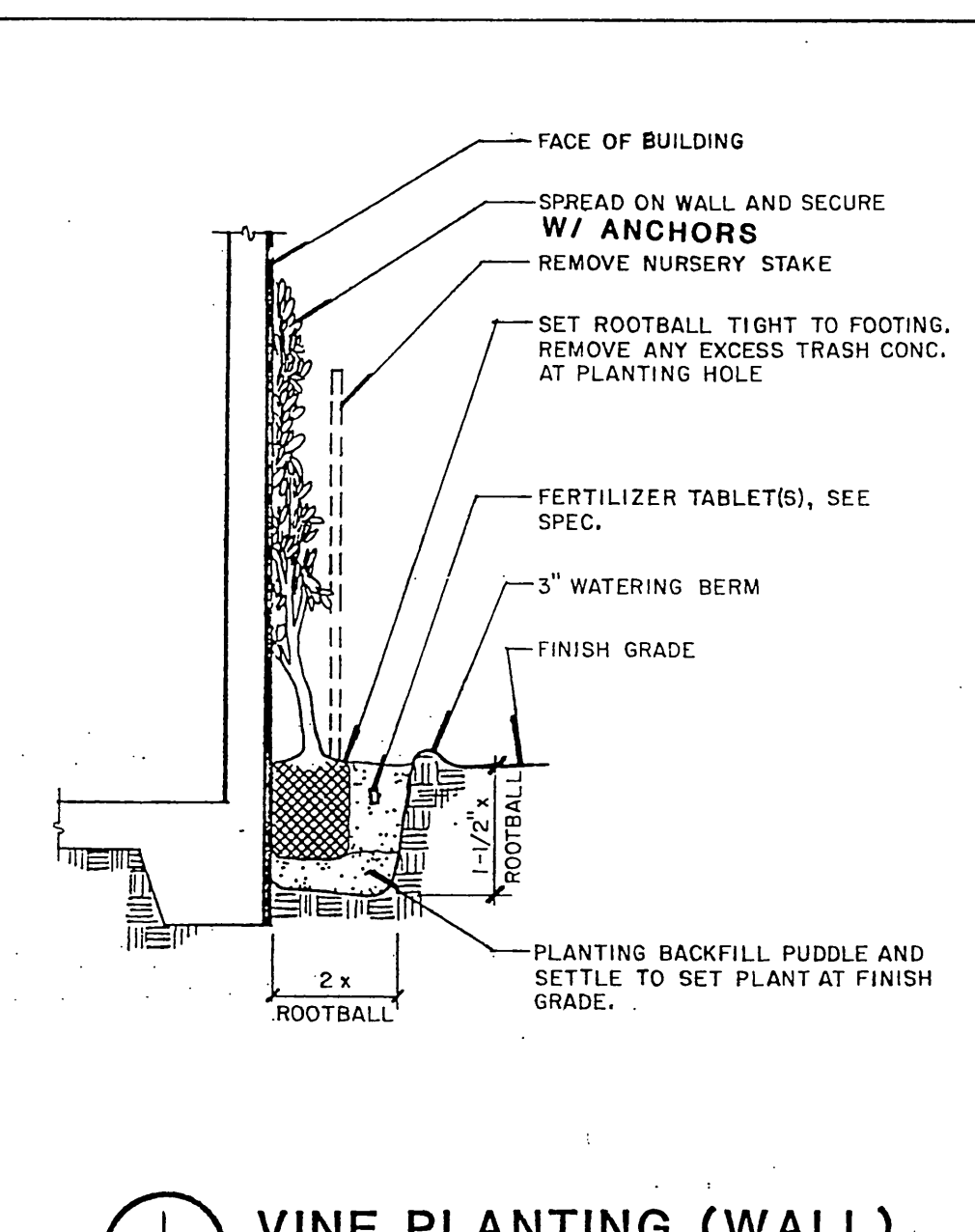
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 CITY OF RIVERSIDE
 GATE VALVE
 Detail No. 4020



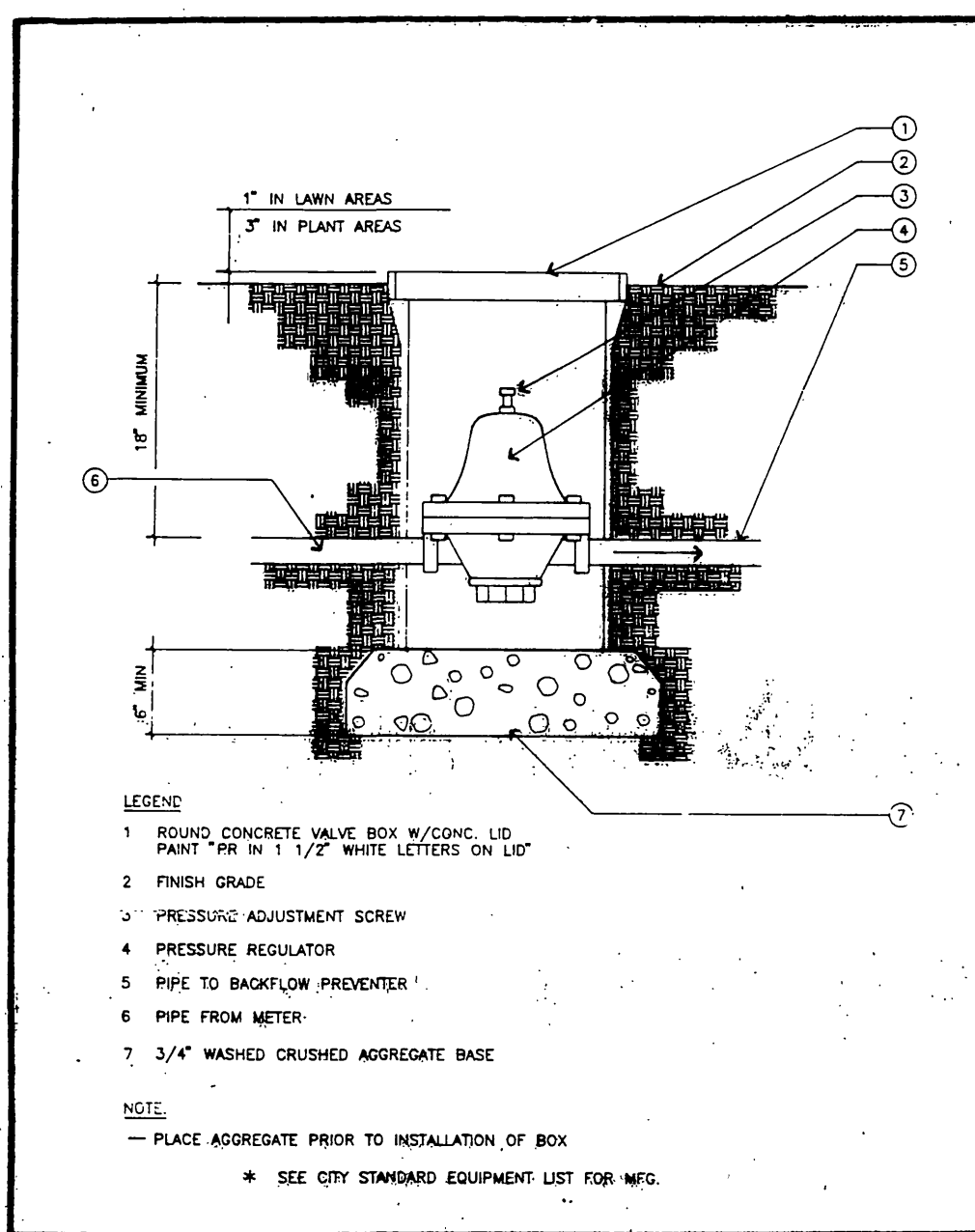
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 Park & Recreation Department
 CITY OF RIVERSIDE
 QUICK COUPLER
 Detail No. 4050



Approved: *[Signature]* Date: 10/2/93
 Revised: *[Signature]* Date: 10/2/93
 Park & Recreation Department
 CITY OF RIVERSIDE
 SPRAY HEAD
 Detail No. 4040



Approved: *[Signature]* Date: 10/2/93
 Revised: *[Signature]* Date: 10/2/93
 Park & Recreation Department
 CITY OF RIVERSIDE
 VINE PLANTING (WALL)
 Detail No. 4040



Approved: *[Signature]* Date: 10/2/93
 Revised: *[Signature]* Date: 10/2/93
 Park & Recreation Department
 CITY OF RIVERSIDE
 PRESSURE REGULATOR
 Detail No. 4030

SECTION 02441 - IRRIGATION
PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

The provisions of the "Standard Specifications for Public Works Construction", current edition, shall apply except as modified herein.

1.02 SCOPE:

A. General:

The Work of this section shall include the furnishing of all labor, materials, equipment and services necessary to provide complete operating irrigation systems, including 120 volt electrical service to the controller, as well as shown on the Drawings and as specified.

B. Related Work Specified Elsewhere:

Site Grading	02110
Site Clear and Grub	02111
Selected Site Demolition	02112
Planting	02400
Electrical	16530

1.03 SUBMITTALS:

A. Materials List:

Contractor shall submit a complete materials list for approval by the City prior to performing any Work. Catalog data and full descriptive literature must be submitted whenever the use of items different than those specified is requested. Notarized certificate must be submitted by plastic pipe and fitting manufacturer indicating that material complies with specifications, unless material has been previously approved.

Material list shall be submitted using the following format:

Item	Description	Manufacturer	Model No.
1	Pressure Supply Line	_____	_____
2	Lawn Head	_____	_____
etc.	etc.	etc.	etc.

B. "Record" Prints:

- Record accurately on one set of blue-line prints all changes in the Work constituting departures from the original Contract Drawings, including changes in pressure and non-pressure line locations.
- The changes and dimensions shall be recorded in a legible and workmanlike manner on the prints to the City for approval.
- Dimension from two permanent point of reference (buildings, monuments, sidewalks, curbs, pavement, etc.) Data to be shown on "record" prints shall be recorded day-to-day as the project is being installed.
- Show locations and depths of the following items:
 - Point of connection.
 - Routing of sprinkler pressure lines (dimension maximum 100 feet along routing).
 - Gate valves.
 - Sprinkler control valves.
 - Quick coupling valves.
 - Routing of control wires.
 - Related equipment (as may be directed)
- Maintain record prints on site at all times.

1.04 INSPECTIONS:

A. Inspections will be required for:

- Pressure test of irrigation mainline.
- Coverage test.
- Final inspection/start of maintenance.
- Final acceptance.

B. Inspection Requests:

Contractor shall notify the Park Projects Inspector in advance for requesting all inspections as follows:
Pressure supply line installation and testing - 36 hours (1-1/2 working days)
System layout - 36 hours (1-1/2 working days)
Coverage tests - 36 hours (1-1/2 working days)
Final inspection - 48 hours (2 working days)
When inspections have been conducted by other than the Park Projects Inspector, the Contractor shall show evidence of when and by whom these inspections were made.

No inspection will commence without "record" prints. In the event the Contractor calls for an inspection without completing previously noted corrections, or without preparing the system for inspection, the inspection will be canceled and the Contractor back time and consultant time lost.

C. Closing inspection Work:

Do not allow of cause any of the Work of this section to be covered up or enclosed until it has been inspected, tested and approved by the City.

D. Coverage test:

When the sprinkler system is completed, Contractor shall perform a coverage test in the presence of the City to determine if the water coverage for planting areas is complete and adequate. This test must be accepted by the City before planting can commence.

B. Hydrostatic test:

- Prior to the installation of any valves, all pressure lines shall be tested under a hydrostatic pressure of 150 psi for a period of not less than two hours, with all ends of lines capped and the line fully charged with water after all air has been expelled from the line.
- All hydrostatic tests shall be made in the presence of the Park Inspector or his designated representative. No pressure line shall be backfilled until it has been inspected, tested, approved in writing, and the mainline and valve locations have been noted on the "record" prints.
Contractor shall furnish necessary force pump and all other test equipment.

1.05 TURNOVER ITEMS:

A. Controller Charts:

- "Record" prints must be approved by the Park Planning Coordinator before chart is prepared.
- Provide one controller chart of the minimum size controller door will allow for each automatic controller. Chart shall show the area covered by the controller.
- The chart is to be a reduced copy of the actual "record" print. In the event the controller sequence is not legible when the print is reduced, it shall be enlarged to a readable size.
- Chart shall be marked with a different color to show the area of coverage for each section.
- When completed and approved, the chart shall be hermetically sealed between two pieces of clear plastic, each piece being 20 mils in thickness. Chart shall be installed in the controller enclosure using velcro fasteners.
- Controller charts shall be completed prior to final inspection.

B. Operation and Maintenance Manuals:

Within a minimum of 14 calendar days prior to acceptance of construction, prepare and deliver to the City all required descriptive manuals, properly prepared in two individually bound copies of the Operation and Maintenance Manual and the manual shall describe the material installed and shall be sufficient detail to permit operation and maintenance to identify, operate, and maintain all equipment. Spare parts lists and related information and the manual shall be included for each equipment item installed. Each complete, bound manual shall include the following information:

- Index sheet stating Contractor's address and telephone number, including names and addresses and telephone numbers of local manufacturer's representatives.
- Complete operating and maintenance instructions on all major equipment.

C. Materials to be furnished:

- Supply as part of this contract the following items:
 - 48 additional sprinkler heads of each type and spray pattern shown.
 - Two (2) wrenches for disassembly and adjustment of each type sprinkler head installed.
 - Two keys for each automatic controller.
 - Two couplers with a 3/4" bronze hose bib, bent nose type with hand wheel and two coupler keys.
 - One valve box cover key.
 - "Record" prints.
 - Remove and turn over backflow device valve handles.
 - Documentation of Water Department's inspection and acceptance of backflow device.
- The above items shall be turned over to the City at the conclusion of the project - Final Acceptance Inspection.

1.06 GUARANTEE:

A. General:

The entire sprinkler system, including all Work done under this Contract, shall be guaranteed against all defects and fault of material and workmanship for a period of one (1) year following the filing of the Notice of Completion. All materials used shall carry a manufacturer's guarantee for one (1) year.
Should any problem with the irrigation system be discovered within the guarantee period, it shall be corrected by the Contractor at no additional cost to the City within ten (10) days of the receipt of written notice from the City. The Contractor shall be responsible for the cost of any repairs or replacement of materials or materials within a period of one (1) year from date of acceptance of the above named project by the City. Riverside, California, at no additional cost to the City. We shall make such repairs or replacements within 14 calendar days following written notification by the City. When the immediate repair or replacement of the equipment or materials is necessary for the safety, health or welfare of the public, the Contractor shall conform with Section 212-2.4 of the Standard Specifications. In the event of such an emergency after initial repairs, if we fail to initiate and complete such repairs in a timely manner, the Director may direct the City to perform such repairs as may be deemed necessary to correct the Work and immediately place the facility back in operation in such condition. If such procedure is implemented, we shall bear all the expenses incurred by the City. In all cases, the judgment of the Director shall be final in determining whether an operational emergency exists. In the event of our failure to make such repairs or replacements within the time specified after receipt of written notice from the City (other than operational emergency), we authorize the City to have said repairs or replacements made at our expense and we will pay the costs and charges therefore upon demand.

B. Form of Guarantee:

Guarantee shall be submitted on Contractors own letterhead as follows:

GUARANTEE FOR SPRINKLER IRRIGATION SYSTEM

We hereby guarantee the sprinkler irrigation system we have furnished and installed against defects in materials and workmanship, ordinary wear and tear and unusual abuse, or neglect expected, and that the Work has been completed in accordance with the Drawings & Specifications. We agree to repair or replace any or all of the Work together with any other adjacent work which may be displaced by so doing, that may prove to be defective in its workmanship or materials within a period of one (1) year from date of acceptance of the above named project by the City. Riverside, California, at no additional cost to the City. We shall make such repairs or replacements within 14 calendar days following written notification by the City. When the immediate repair or replacement of the equipment or materials is necessary for the safety, health or welfare of the public, the Contractor shall conform with Section 212-2.4 of the Standard Specifications. In the event of such an emergency after initial repairs, if we fail to initiate and complete such repairs in a timely manner, the Director may direct the City to perform such repairs as may be deemed necessary to correct the Work and immediately place the facility back in operation in such condition. If such procedure is implemented, we shall bear all the expenses incurred by the City. In all cases, the judgment of the Director shall be final in determining whether an operational emergency exists. In the event of our failure to make such repairs or replacements within the time specified after receipt of written notice from the City (other than operational emergency), we authorize the City to have said repairs or replacements made at our expense and we will pay the costs and charges therefore upon demand.

PROJECT:

LOCATION:

SIGNED: _____
ADDRESS: _____
PHONE: _____

C. After the system has been completed, the Contractor shall instruct the Parks Project Department Representative in the operation and maintenance of the system and shall furnish a complete set of operating instructions.

D. Any settling of trenches which may occur during the one-year period following acceptance shall be repaired to the City's satisfaction by the Contractor without any additional expense to the City. Repairs shall include the complete restoration of all damage to planting, paving or other improvements of any kind as a result of the Work.

PART 2 - MATERIALS

2.01 GENERAL:

All materials shall conform with section 212 of the Standard Specification except as modified herein.

2.02 PIPE AND FITTINGS:

- Pipe - General:
 - Pressure supply lines 2 inches in diameter and up to 8 inches in diameter shall be either Class 15 solvent weld or Class 200 rubber gasket type PVC. Solvent weld and ring type pipe shall not be used together on the same pressure supply line.
 - Pressure supply lines 1-1/2 inches in diameter and smaller shall be minimum schedule 40 PVC.
 - Non-pressure lines shall be minimum Class 200 PVC.
- Steel Pipe:
 - Amend Standard Specifications Section 212-2.1.2 to read: "All steel pipe shall be hot-dipped galvanized. All pipe shall be at least 16 gauge. Steel pipe shall be 250 pound rated galvanized malleable iron, banded pattern. Pipe sizes indicated on the Drawings are nominal inside diameter, unless otherwise noted."
- Plastic Pipe:
 - Add the following to Standard Specifications Section 212-2.1.3: All plastic pipe shall bear the following markings: manufacturer's name, nominal pipe size, schedule or class, type of material, pressure rating in PSI, NSF seal of approval, and date of extrusion.
 - Amend Standard Specifications Section 212-2.1.3 to read: All plastic pipe fittings shall be standard weight schedule 40 and shall be injection molded threads. No cut threads will be accepted on PVC pipe and fittings. All tees and elbows shall be manufactured in injection molding that said Landscape Architects shall nipples shall be standard weight schedule 80 with molded threads.

Amend first sentence of Standard Specifications Section 212-2.1.6: Fittings for A.C.P. couplings except as follows:

- Double strap service clamps with rubber seals and flat bronze straps may be used for connections 3/8 inch or less than the diameter of the pipe.
- Tapped A.C.P. couplings with brass inserts may be used for connections of 3/4, 1, 1-1/4, 1-1/2 and 2 inches.

2.03 VALVES AND VALVE BOXES:

A. Remote Control Valves:

Add the following to Standard Specifications Section 212-2.2: Valves shall be self-closing, backflow diaphragm activated, of normally closed type. Valve solenoid shall be corrosion-proof and constructed of stainless steel molded in epoxy to form an integral unit, and shall be 24 volt A.C., 2.0 watt maximum (2" and smaller valves).

Valve shall close against flow without chatter and with minimum closing surge pressure (minimum seconds closing time per valve).

Valve shall be completely serviceable in the field without removing valve body from line.

B. Quick Coupling Valves:

Add the following to Standard Specifications Section 212-2.2.6: Quick coupling valves shall have locking vinyl cover and be 1" in size.

C. Gate Valves:

All gate valves shall be capable of withstanding a minimum working pressure of not less than 150 psi.

D. Valve Boxes:

Add the following to Standard Specifications Section 212-2.2.7: All remote control valve boxes shall be rectangular concrete boxes with non-hinged locking cast-iron covers. Valve station number shall be stenciled in two-inch-high (2") numerals on cover using epoxy resin base paint of a contrasting color. Gate valve boxes shall be round concrete boxes with non-hinged locking cast iron covers marked with marked with the words "G.V." with letters cast or tooled in the cover.

2.04 BACKFLOW PREVENTER:

Add the following to Standard Specifications Section 212-2.3: The backflow prevention unit shall be a reduced pressure type vacuum breaker of the size, material, type, and model number as indicated on the drawings. If not indicated, the device shall be the same size as the water service and the manufacturer and model number shall be as approved by the City.
Should any problem with the irrigation system be discovered within the guarantee period, it shall be corrected by the Contractor at no additional cost to the City within ten (10) days of the receipt of written notice from the City. The Contractor shall be responsible for the cost of any repairs or replacement of materials or materials within a period of one (1) year from date of acceptance of the above named project by the City. Riverside, California, at no additional cost to the City. We shall make such repairs or replacements within 14 calendar days following written notification by the City. When the immediate repair or replacement of the equipment or materials is necessary for the safety, health or welfare of the public, the Contractor shall conform with Section 212-2.4 of the Standard Specifications. In the event of such an emergency after initial repairs, if we fail to initiate and complete such repairs in a timely manner, the Director may direct the City to perform such repairs as may be deemed necessary to correct the Work and immediately place the facility back in operation in such condition. If such procedure is implemented, we shall bear all the expenses incurred by the City. In all cases, the judgment of the Director shall be final in determining whether an operational emergency exists. In the event of our failure to make such repairs or replacements within the time specified after receipt of written notice from the City (other than operational emergency), we authorize the City to have said repairs or replacements made at our expense and we will pay the costs and charges therefore upon demand.

2.05 ELECTRICAL MATERIALS:

A. Conduit:

Amend Standard Specifications Section 212-3.2.1 to read: Conduit shall be schedule 40 PVC of sufficient size to carry all proposed wiring. Wiring shall be in a separate sleeve.

B. Wire:

Add the following to Standard Specifications Section 212-3.2.2:

All common wire shall be white with a colored stripe. Stripe color shall be different for each controller unit installed. All control wire shall be of one color other than white or green. A different color control wire shall be used for each controller installed.

C. Electrical Service:

Materials for electrical service shall comply with the standard specifications, governing utility agency standards, and requirements of all applicable codes.

2.06 CONTROLLER UNIT:

Add the following to Standard Specifications Section 212-3.3:

Controllers shall be wall mounted type, as indicated on the drawings, with a heavy duty watertight case and locking hinge cover.

2.07 IRRIGATION HEADS:

All irrigation heads shall be as shown on the plans and shall conform with Section 212-2.4 of the Standard Specifications.

PART 3 - EXECUTION

3.01 GENERAL:

All Work shall conform with section 308 of the Standard Specifications except as modified herein. No Work of this section other than sleeving under pavement shall commence prior to the separate acceptance of all Grading Work specified in Section 02210.

Add the following to Standard Specifications Section 308-5.1:

A. Irrigation System Design & Water Supply:

- The irrigation system design is based upon an available water pressure of _____ p.s.i. at a flow rate of _____ g.p.m. Individual stations are designed to this minimum p.s.i. The system is also designed to withstand a maximum pressure of _____ p.s.i. Contractor shall verify the design water supply location shown on the Drawings prior to starting construction. The contractor shall notify the Park Projects Inspector in writing of any discrepancies noted. Failure to provide such written modifications to the irrigation system as necessary to provide for a fully operational system providing 100% coverage at the operating pressure available, shall be at no additional cost to the City.
- Connection to, or the installation of, the water supply shall be at the location shown on the Drawings. Minor changes caused by actual site conditions shall be made at no additional cost to the City.

B. Electrical Service:

The Contractor shall provide electrical service as necessary and make 120V connection to the irrigation controller.

C. Code Requirements:

Prior to all Work of this section, the contractor shall carefully inspect the installed work of all other trades and verify that all such Work is complete to the point where this installation may properly be completed. The Contractor shall assume full responsibility for the design, the referenced standards, and the manufacturer's recommendations.

In the event any equipment or methods indicated on the Drawings or in the Specifications is in conflict with local codes, immediately notify the Park Projects Inspector prior to installing the Work. If this notification is not provided, the Contractor shall assume full responsibility for the cost of all revisions necessary to comply with all codes.

D. Grades:

Before starting Work of this section, the contractor shall obtain the written acceptance of the City of the fine grades, and written authorization for the Work of this section to proceed. The Contractor is to keep within the specified material depths with the exception of the final grading. Failure to obtain written acceptance may subject the Contractor to the City's rejection of the Work. The Contractor shall be held responsible for the cost of all to achieve acceptable depths of cover, all as directed by the City and at no additional cost to the City.

E. Coordination with Work of other trades:

Make all necessary measurements in the field to ensure precise fit of items in accordance with the original design. The Contractor shall coordinate the installation of all irrigation materials with all other Work. Special attention shall be given to coordination of piping locations versus installation to avoid conflicts.

F. The Contractor shall maintain "record" prints on site at all times. Upon completion of the Work, transfer all "record" prints to the City. Changes and dimensions to reproducible sepi prints. The changes and dimensions shall be recorded in a legible and workmanlike manner, to the satisfaction of the Park Projects Inspector.

3.02 TRENCHING AND BACKFILLING:

A. Trenching:

- Add the following to the Standard Specifications Section 308-2.2: Dig trenches and support pipe continuously on bottom of ditch, where lines occur under paved areas, depth dimensions shall be considered below subgrade.
- Amend Standard Specifications Section 308-2.2, Subparagraph 2) to read: Water Lines continuously pressurized - minimum 18 inches, maximum 25 inches. (These measurements are to be from subgrade elevation for paving under)
- Amend Standard Specifications Section 308-2.2, Subparagraph 3) to read: Lateral sprinkler lines - minimum 12 inches and maximum 16 inches.
- Add the following to Standard Specifications Section 308-2.2: Where it is necessary to excavate adjacent to existing trees, the contractor shall avoid injury to trees and tree roots. Excavation to areas where 2-inch and larger roots occur shall be done by hand. All roots 2 inches and larger in diameter shall be removed and shall be heavily wrapped with wet burlap to prevent scarring or drying, where trenching machine is run close to trees having roots smaller than 2 inches in diameter, the wall of the trench adjacent to the tree shall be hand trimmed, making a clean cut through the roots. Roots 1 inch and larger in diameter shall be painted with two coats of tree seal or adjacent to trenches adjacent to trees shall be closed within 24 hours.

(5) Permanent Resurfacing: Add the following to Standard Specifications Section 308-5.1: All surface improvements damaged or removed as a result of the Work shall be reconstructed by the Contractor to the same dimensions, except for pavement thickness, and with the same type of materials used in the original Work. Trench repairs shall be 1 inch greater in thickness than existing pavement. Concrete pavement shall be removed and replaced in full panels with no horizontal dimension less than five (5) feet. Contractor shall review the plans and lines of concrete removal and replacement with the Park Projects Inspector prior to sawcutting for Removal Work.

B. Backfill:

Amend Standard Specifications Section 308-2.2 to read: Backfill shall be uniformly compacted in 4-inch layers under and around the pipe for the full width of the trench and the full length of the pipe. Materials shall be compacted to dry density equal to adjacent undisturbed soil and shall conform to adjacent grades.

Flooding in lieu of tamping is not allowed without specific prior written approval of the Soil Engineer and the Park Projects Inspector.

Under no circumstances shall the wheels of any vehicle not designed for tire green. A different color soils compaction be used to compact backfill.

3.03 PIPE INSTALLATION:

A. General: Add the following to Standard Specifications Section 308-5.2.1:

- Piping under existing pavement may be installed by trenching, boring, or hydraulic driving permitted under asphalt concrete pavement.
- Cutting or breaking of existing pavement is not permitted except as approved by Park Projects Inspector. When approved, all necessary repairs and replacements will be made at no additional cost to the City.
- Carefully inspect all pipe and fittings before installation, removing all dirt, scale and debris. All pipe and fittings under cover until ready to install; transport plastic pipe on a vehicle with a bed long enough to allow pipe to lay flat, avoid undue bending and any concentrated external load.
- Contractor shall install concrete thrust blocking per the manufacturer's recommendations as to direction and terminal points of pressure in pipe.
- Parallel lines shall not be installed directly over one another. Provide a minimum of 12" clearance between parallel lines in parallel lines.
- For plastic-to-metal connections, work the metal connections first. Use a non-hardening pipe dope on all threaded plastic-to-metal connections, except where noted otherwise.
- All piping under pavement shall be sleeved using schedule 40 PVC sleeves. Each line shall be separately sleeved.
- Do not install multiple assemblies ("manifold") on plastic lines. Provide each equipment assembly (e.g. RCV, quick coupler, gate valve, head, backflow device) with its own service line and sleeve.

B. Plastic Pipes: Add the following to Standard Specifications Section 308-5.2.3:

- Exercise care in handling, loading, unloading, and storing plastic pipe and fittings; store plastic pipe and fittings under cover until ready to install; transport plastic pipe on a vehicle with a bed long enough to allow pipe to lay flat, avoid undue bending and any concentrated external load.
- 360° applicators shall be used to apply primer and solvent on pipe sizes 2-1/2 inches and larger.

3.04 BACKFLOW INSTALLATION:

Add the following to Standard Specifications Section 308-5.3: Install backflow assemblies at locations approved and required by local codes.

3.05 VALVE AND VALVE BOX INSTALLATION:

Amend Standard Specifications Section 308-2.3 to read: Valves shall be the same size as the pipeline in which they are installed unless otherwise specified on the Plans. Valves shall be installed a minimum of three feet in horizontal distance apart, each with its own connection to the pressure main line.

Amend Standard Specifications Section 308-5.3 to read: Install quick couplers and valve boxes per Parks and Recreation Department standard details.

Add the following to Standard Specifications Section 308-5.3: Valves shall be installed in shrub areas whenever possible. No valves or valve boxes other than quick coupler valve boxes shall be installed within a designated athletic playing field.

3.06 SPRINKLER HEAD INSTALLATION:

Amend Standard Specifications Section 308-5.4.1 TO READ: Sprinkler heads shall be installed as designated on the drawings and per Parks and Recreation standard details. Upon completion of the system, the Contractor shall not be responsible for the cost of any additional heads shall be added as necessary to achieve 100% coverage. Up to 2% of the total number of heads in the system are to be added at no additional cost to the City. If a greater number of heads is needed, cost shall be as negotiated by change order.

3.07 CONTROLLER INSTALLATION:

Add the following to Standard Specifications Section 308-5.3: The controller location, as shown on the Plans, is diagrammatic. The final location of the controller shall be as approved by the Park Projects Inspector before installation. The Contractor shall coordinate the electrical service with this location. The controller shall be wall mounted within a 4' x 4' enclosure, unless noted otherwise on the Plans. Controller shall be wall mounted within a 4' x 4' enclosure, unless noted otherwise on the Plans. Enclosure shall be painted with two coats of paint, color as approved, and shall be 4" thick slab for maintenance access shall be provided, size approximately 15 sq. ft., line, grade and dimensions as directed by the Park Projects Inspector.

Following establishment of the turf, the irrigation system shall be programmed to operate during the periods of minimal use of the project area (i.e. 11:00 p.m. through 6:00 a.m.).

3.08 WIRING:

Add the following to Standard Specifications Section 308-5.3: All splice connections shall occur in a valve box. All wire runs between the valve and the controller shall be a continuous run with no splices unless noted otherwise on the Plan.

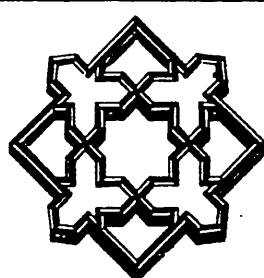
All voltage wiring splices shall be made-up as soldered connections, wrapped with a maximum of two (2) layers of electrical tape and sealed with Scotch-coat. Scotch-lok, uni-pack, Penn-tite, or other similar type are not acceptable.

3.09 FINISHING AND TESTING:

Add the following to Standard Specifications Section 308-5.3: Control valves shall be tested for pressure testing. Amend Standard Specifications Section 308-5.6.2 to read: Pressure test the mains - minimum 2 hours at 150 psi. Add the following to Standard Specifications Section 308-5.6.2: The entire system shall be operating properly before any planting operations commence.

3.10 COMPLETION CLEANING:

Add the following to Standard Specifications Section 308: Upon completion of the Work, the Contractor shall smooth all ground surfaces, remove excess materials, rubbish, debris, etc., sweep adjacent streets, curbs, gutters, and sidewalks, and remove construction equipment from the premises.



ALHAMBRA GROUP
LANDSCAPE ARCHITECTURE
CA Lic. #1568 LA Lic. #201
RECREATION FACILITIES PLANNING
27412 Enterprise Circle West, Suite 200
Tomball, CA 92590 (714) 676-0226
Job No. 92-033

All designs and ideas represented hereon are the property of Alhambra Group, Landscape Architects, and are to be used on this project only. They shall not be used otherwise without the written permission of said Landscape Architects. Any changes made by parties other than said Landscape Architects shall relieve Landscape Architects of responsibility for the project or effected portion thereof.

MARK	REVISIONS	APPR. DATE
DESIGNED BY: JLC	DRAWN BY: JLC	CHECKED BY: JLC

CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT			
APPROVED BY	DATE	BY	DATE
PRINCIPAL ENGINEER	5/24/93	DATE	5/24/93
PARK DEPARTMENT	5/24/93	DATE	5/24/93
TRAFFIC DIVISION	5/24/93	DATE	5/24/93
CHIEF P.E. ENGINEER	5/24/93	DATE	5/24/93

TRACT # 27288 & 27289
REVERSE FRONTAGE
IRRIGATION SPECIFICATIONS

ACCOUNT NO.
R-3313 L
SHEET L-16 OF 17

HORIZ. SCALE: 1" = VERT. SCALE: 1" =

INDEXED 6-2-93 4/1

SECTION 02480 - PLANTING
PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

The provisions of the "Standard Specifications for Public Works Construction" shall apply except as modified herein.

1.02 SCOPE:

The work required is indicated on the Plans and includes, but is not necessarily limited to: soil preparation; finish grading (as distinguished from fine grading per section 02210); planting trees; grading and stakes; curbs, drainage ditches and groundcover; hydroseeding turf; soil erosion control; maintenance; plant establishment; guarantees; and replacements.

1.03 SOILS TEST:

The Contractor shall notify the Park Projects Inspector upon completion of fine grading and prior to commencement of soil preparation work. The Contractor will obtain agronomic soils test for all planting areas after completion of fine grading and prior to start of soil preparation work. Tests will be performed by an approved agronomic soils testing laboratory and will include a fertility and suitability analysis with written recommendations for soil preparation planting backfill mix, auser hole requirements, and post plant fertilization program shall take precedence over the minimum amendment and fertilizer application rates and specified herein only when they exceed the soils testing work commencing upon the acceptance of the fine grading work per section 02210 by the Parks Projects Inspector.

1.04 GUARANTEE

The guarantee provisions of the Special Provisions are supplemented as follows as they pertain to the tree planting portion of the Work:

- All trees installed under the Contract shall be guaranteed against any death, poor condition, inadequate or inferior materials and/or workmanship for a period of one (1) year following Final Acceptance.
- During the guarantee period, any trees found to be dead, missing, or in poor condition shall be replaced by the Contractor within (10) days of written notification. Park and Recreation Department shall be the sole judge as to the condition of the trees.
- Replacement shall be made in accordance with City standards.
- Material and the labor involved in replacing trees shall be provided by the Contractor at no additional cost to the City.

1.05 INSPECTIONS:

Inspections will be required. The Contractor shall contact the Park Projects Inspector at least 48 hours (2 working days) in advance of an anticipated inspection. An inspection will be required at each of the steps listed below:

- Upon completion of fine grading and prior to commencement of soils samples.
- Inspection of completed finish grading work following soil preparation work.
- When container plants and/or bare root stock are spotted for planting, but before planting holes are excavated.
- When planting and all other indicated or specified work has been completed.
- During application of pre-emergent chemical.
- At the start of the Plant Establishment Period.
- At the end of the Plant Establishment Period, prior to Final Acceptance of the Project for maintenance by the City, this acceptance for maintenance will be confirmed in writing by the Park and Recreation Department.

1.06 SUBMITTALS

- The following written certificates are required to be submitted to the Park Projects Inspector upon delivery of the respective materials to the job site:
 - Total Quantity of commercial fertilizers, by type
 - Total Quantity of soil amendments and conditioners, by type
 - Total Quantity of iron sulphate
 - Total Quantity of mulch
 - Total Quantity of Seed by Type

1.07 PLANT ESTABLISHMENT PERIOD:

The length of the Plant Establishment Period shall be as specified in section 0-7.4 of the Special Provisions; see also Subsection 3.11 of this section regarding start of Plant Establishment Period.

PART 2 - MATERIALS

2.01 GENERAL:

All materials shall conform with Section 212 of the Standard Specifications except as modified herein.

2.02 FERTILIZER, SOIL AMENDMENTS AND CONDITIONERS:

Add the following to Standard Specifications Section 212-1.2.3:

- Planting Tablets: Tightly compressed long lasting, slow release fertilizer tablets weighing 21 grams with a potential acidity of not more than 5 percent, by weight and having an analysis of 20-10-5 derived from the sources listed in the following guaranteed analysis:

GUARANTEED ANALYSIS

Total Nitrogen (N) 20%
Derived from urea formaldehyde
7.0% water soluble nitrogen
13.0% water insoluble nitrogen
Available Phosphoric Acid (P₂O₅) 10%
Derived from calcium phosphates
Soluble Potash (K₂O) 5%
Combined Calcium (Ca) 2.6%
Derived from calcium phosphates
Combined Sulphur (S) 1.6%
Derived from ferrous & potassium sulfates
Iron (expressed as elemental Fe) 3.5%
Derived from ferrous sulphate

- Commercial fertilizer shall bear the manufacturers guaranteed statement if analysis and shall meet the following minimum requirements: 16% nitrogen, 8% phosphoric acid, and 8% potash.
- Organic Soil Amendment:
Shall be type 1 organic soil amendment, wood based product, nitrogen stabilized, and free of foreign matter.

D. Soil Conditioners:

Add to Standard Specifications, new Section 212-1.2.6:
Inorganic conditioners shall be agricultural grade gypsum, soil sulfur and iron sulphate. Iron sulphate shall be ferric sulphate or ferric sulphate in pelletized or granular form containing not less than 18.5% iron, expressed as metallic iron, and shall be labeled as "Fertilizer Grade" mineral with the State Department of Food and Agriculture in compliance with Chapter 5 "Fertilizing Materials", of Division 7 of the Food and Agriculture Code of California, commencing at Section 14501.

2.03 SEED:

Add the following to Standard Specifications, Section 212-1.3:

TURF SEED MIX
Perennial Ryegrass (50% 'Penn Pine', 50% 'Derby') 70% 98%
F1 Bluegrass (50% 'Rugby', 50% 'Parade') 60% 98%
Un-Bulled Bermuda (Certified Arizona Common) 20% 98% 85%

(Note: For application in May through September, use Bulled Bermuda.)

Seeding rate: 218 pounds per acre (5 pounds per 1,000 square feet)

2.04 HYDROSEEDING MATERIALS:

Add the following to Standard Specifications Section 212-1.3:

Water: All water used for hydroseeding shall be potable domestic water. See General Provisions section 7-8.5 regarding availability of water and temporary construction water and charger water drawn from City fire hydrants.

Seed: Turf seed mix as specified.

Fiber Mulch: Shall be produced from cellulose such as wood pulp or similar organic material and shall be of such character that it will disperse into a uniform slurry when mixed with water. The fiber shall be of such character that when used in the applied mixture, an absorbent or porous mat, but not a membrane will result on the surface of the ground. Materials which inhibit germination or growth shall not be present in the mixture.

Binding Agent: Shall be a dry powder organic concentrate, Ecology Controls "W-Binder" as available, from Robinson Fertilizer Company, Anaheim, CA 714/612-9715 or City approved equal.

Fertilizers:

- Controlled Release Fertilizer (CRF) shall have an analysis of 16-7-12 (+iron), 9-12 mo. formulation resin coated prills, "sienblen" as manufactured by Grace Sierra Chemical Co., Milpitas, CA 1-800-492-8255 or City approved equal.
- Single super phosphate shall have an analysis of 0-18-0, and shall be as manufactured by Grace Sierra, or City approved equal.

2.05 PLANTS:

- Add the following to Standard Specifications Section 212-1.4.1:

All plants shall be true to name, and none of each bundle or lot shall be tagged with the same name and size of plants in accordance with the standards of practice recommended by the American Association of Nurseryman. The root condition of plants furnished in containers shall be determined by the removal of the earth from the roots of not less than two plants from each of 2% of the total number of plants of each species or variety except when container-grown plants are from several different sources; in which case, the roots of not less than two plants of each species or variety from each source shall be checked by the Parks Projects Inspector at his option. The selection of plants to be checked will be made by the Park Projects Inspector.

- Amend the Standard Specifications Sections 212-1.4.2 and 212-1.4.3: All container plants supplied by the Contractor shall be of the specified standard height and diameter set by the American Standard for Nursery Stock. The height of the trees shall be measured from the root crown to the last division of the terminal leader and the diameter shall be measured six (6) inches above the crown roots.

- Modify Standard Specifications Section 212-1.4.6: All cuttings used on the project shall be fully rooted cuttings unless otherwise approved in writing by the City.
- Bare root stock shall conform to the American Nurseryman's Association standards. Minimum caliper shall be (2) 1/4 inch diameter and minimum height shall be twelve (12) feet.

2.06 HEADERS, STAKES AND TIES:

- Add the following new section to Standard Specifications Section 212-1.5.3:

- Tree stakes shall be straight-grained lodgepole pine, or City approved equal. Stakes shall be free from knots, checks, splits, or disfigurements.
 - Tree ties shall be made from tire casting, 22" long by 3/4" wide, fastened to tree stake with two galvanized 5d roofing nails each.
- Add the following new section to Standard Specifications Section 212-1.6.4: Concrete Headers/Mow Curbing - (EXCLUDED) Concrete shall be 5 sack mix with a maximum slump test of four inches (4"). Provide a continuous line without waviness.

2.07 JUTE NETTING:

Jute netting shall be new and shall be of uniform, plain weave, flame retardant mesh. The mesh shall be dyed green and shall be made from single jute yarn. The netting shall be loosely twisted construction and shall not vary in thickness by more than one-half its normal diameter. Jute netting shall be furnished in rolled strips and shall meet the following requirements:

- Width - 48 inches, with a tolerance of one inch wider or narrower.
- Minimum 78 warp ends per width of roll.
- Minimum 41 weft ends per yard of length.
- Weight shall average 1.22 pounds per linear yard, with a tolerance of 5 percent heavier or lighter.

PART 3 - EXECUTION

3.01 GENERAL:

All Work shall conform with section 308 of the Standard Specification, except as modified herein.

At the Contractor's option, subject to the Park Project Inspector's acceptance of the mineral available and the appropriateness of the planting, bare root stock may be substituted for 15 gallon and 24" box tree species specified if commercially available as bare root plantings and provided the minimum caliper and height requirements of Subsection 2.05 Subparagraph D above are met, all at no charge in contract price.

3.02 WEED CONTROL MEASURES:

Add the following to Standard Specifications Section 308-2.4:

- Upon completion of all fine grading work per section 02210 Grading, and prior to soil preparation, perform weed control measures as follows:
 - Irrigate all areas designated to be planted for a minimum of 10 minutes per setting, two settings per day, for seven days to germinate all weed seed possible.
 - Apply a contact weed killer and allow sufficient time to obtain complete kill of all weeds germinated.
 - Repeat step one above.
 - Repeat step two above.

3.03 SOIL PREPARATION:

Add the following to Standard Specification Section 308-2.3:

- All fine grading and raking per section 02210 and weed control measures shall be completed. Should 30 calendar days elapse between completion of soil preparation and commencement of planting, all areas shall be prepared again.
- This Work shall not commence until the agronomic soil test has been completed. Should 30 calendar days elapse between completion of soil preparation and commencement of planting, all areas shall be prepared again.
- Planting areas with slopes 3:1 and steeper shall not be soil prepared. In lieu of soil preparation, each slope shall be planted with a single layer of fiber mulch per Section 3.07, c. below. In all planting areas with gradients less than 3:1, a layer of soil amendments shall be spread and rototilled into the soil to a minimum depth of 4 inches, or as recommended by the soils report, so that the soil shall be loose, friable and free of rocks, sticks, and other objects undesirable to planting.
- The following soil amendments shall be added per 1,000 square feet to all planting areas with gradients less than 3:1 (apart from soil test recommendations shall take precedence where these minimum amounts are exceeded):
 - 6 cubic yards Type I organic soil amendment.
 - 15 pounds commercial fertilizer.
 - 100 pounds gypsum.
 - Soil sulfur per soils report.

3.04 FINISH GRADING:

The Contractor shall finish grade all planting areas filling as needed or removing surplus dirt, raking to remove all rocks and debris and establish a uniform grade. The Contractor shall maintain a uniform grade. All areas shall slope to drain. Flow lines shall be established to roads, curbs, drainage ditches and sidewalks and/or sidewalks as shown on the Plans and as directed. All fill material placed within the top 12" from finish grade elevations in all planting areas shall be topsoil.

All landscape areas shall be finish graded (as distinguished from fine grading as specified in Section 02210) to "dress out", maintain and/or re-establish finish grade. The Contractor shall be responsible for establishing finish grade lines as approved prior to amending the soil. Contractor shall call for inspection upon completion of finish grading work. Contractor shall not proceed with planting work until finish grades have been inspected and accepted by the Park Projects Inspector.

3.05 EROSION CONTROL:

Add new section to the Standard Specifications: 308-4.9.6. Jute Netting:

Netting shall be provided during the Plant Establishment Period when and as directed by the Park Projects Inspector, along flow lines and other locations where erosion is evident. Jute netting shall be installed loosely, up and down the slope. The installed netting shall fit the soil surface contour and shall be held in place by 9-inch long, 11-gauge (minimum) steel wire staples driven vertically into the soil at approximately 24-inch spacing. Jute netting strips shall overlap along the sides at least 6 inches. Ends of strips shall be buried into the soil at least 6 inches. Lap all ends of rolls a minimum of 24".

3.06 PLANTING BACKFILL:

- All backfill materials shall be bulk mixed, not individually mixed at each plant pit.
- Soil used for backfill planting pits for container plants shall be enriched using the following blend per cubic yard (agronomic soil test recommendations to be reviewed prior to soil mixing):
 - 60# top soil
 - 10# Type I organic Amendment
 - 3 lbs. gypsum
 - 2 lbs. commercial fertilizer
- Bare root stock backfill shall consist of 10% wood shavings and 90% top soil with fertilizer and soil conditioners as specified for container plants.

3.07 PLANTING:

- Amend the Standard Specifications Section 308-4.5 to coordinate with Section 3.06 for specified backfill mix.
- Add the following to the Standard Specification Section 308-4.5:

- Soil surrounding planting pit shall be in a friable condition and moist to a depth of 8"
- Backfill using specified soil mix to within 8" of finish grade. At this depth, place the plant fertilizer tablets Agriform 20-15-5, 21 grams each, or City approved equal. A minimum of 1 tablet for 1 gallon, 3 tablets for 5 gallons, 5 tablets for 15 gallons, and 8 tablets for a 24" box. Complete backfilling to finish grade.
- Trees (other than relocated palms) shall be planted at such a depth that the crown roots bear the same relative position to finish grade as they did to the soils where they were grown. After planting, the planting shall be compacted carefully into place without injuring the roots of the trees by breaking up the ball of earth surrounding the roots.

- Add the following to Standard Specifications Section 308-4.7:

- On slopes exceeding 3:1 ratio, apply 5 gram Agriform tablets, one per plant in lieu of soil preparation work.
- Mulch and fertilize groundcover areas using 1.5 cubic yards of wood shavings and 5 lbs. of the commercial fertilizer tablets Agriform 20-15-5, 21 grams each, or City approved equal, at 30 day intervals throughout the duration of the Contract period to 4 applications, after which decrease frequency to once every 90 days.
- All groundcover and bare dirt are to be treated with a pre-emergent chemical (subject to approval by the park inspector prior to application) to prevent weeds from being established. The chemical shall be applied by a licensed Pest Control Agent. This treatment shall be applied at the following intervals during the Contract: a) before planting, b) at Establishment Period. The Park Projects Inspector, (714) 782-5222, shall be given a minimum of 48 hours (2 working days) notice prior to each application. No chemicals shall be applied other than in the presence of the Inspector.

3.08 TREE STAKING:

Amend the Standard Specifications Section 308-4.6.1 and 308-4.6.2 to read: Stake trees per park and recreation Department standard detail.

3.09 TURF PLANTING:

Add the following to the Standard Specifications Section 308-4.9.2, b:
Mixing of hydroseed slurry: Mixing shall be performed in a tank, with built-in continuous agitation and recirculation system of sufficient operating capacity to produce a homogeneous slurry of fiber, Rybinder, seed, fertilizer and water in the designated unit proportions.

Fiber Mulch 1,500 lbs./acre
Fertilizers:
Single superphosphate 970 lbs./acre (20%1000sf)
200 lb./acre (4 1/2%1000sf)
Seed
As specified in Subsection 2.03 above
Binding Agent 100 lbs./acre (use on all slopes 5:1 and steeper)
Water 3,000 gal./acre (maximum)
Agricultural Grade Gypsum 500 lb./acre

With agitation system operating at part speed, water shall be added to the tank, good recirculation shall be established. Materials shall be in such a manner that they are uniformly blended into the mixture in the following sequence (assumes a nominal 1500 gallon tank):
When tank is 1/3 filled with water:

- Add binding agent 1/2 acre requirement.
- Add 5 - 10 pound bags of fiber mulch.
- Add seed 1/2 acre requirement.
- Add fertilizer - 1/2 acre requirement.

Agitate mixture at full speed when the tank is half-filled with water.

Add remainder fiber mulch requirement, 10 bags, before tank is 3/4 full. Add remainder fertilizers, seed and gypsum. Slurry distribution should begin immediately.

Area to be hydroseeded shall be moistened to a depth of six inches just prior to application.
Application: Hydroseed slurry shall be applied under high pressure evenly and result in a uniform coat on all areas to be treated. Care shall be exercised to ensure that plants in place are not subjected to the direct force of water. The application slurry shall be immediately removed from walks, structures, plaques, etc., that are inadvertently sprayed.

All bare spots shall be reseeded by the Contractor within 10 days. The Contractor shall be responsible for all reseeded areas for as long after seeding as necessary until final germination and establishment is realized and approved by the City.

The slurry shall not be sprayed on undesignated areas. Any slurry spilled or sprayed into areas other than those designated to receive spray shall be cleaned up by the Contractor's expense to the satisfaction of the City.

3.10 WATERING:

Add the following to the Standard Specifications Section 308-4.9.5:

- It shall be the Contractor's responsibility to maintain a balanced watering program to ensure proper growth until Final Acceptance of the Work.

- Immediately after planting, apply water to each plant. Apply water in a moderate stream in the planting hole until the material about the roots is completely saturated from the bottom of the hole to the top of the ground.
- Apply water in sufficient quantities and as often as seasonal conditions require to keep the planted areas moist at all times, well below the root system of plants.
- Irrigation:
 - Contractor shall properly and completely maintain the irrigation system. A balanced water program shall be maintained to ensure proper germination and growth until Final Acceptance of the Work. Plants which cannot be watered by a hose.
 - All controllers are to have each station individually adjusted on a weekly basis. System shall be set considering the application rate each area is capable of receiving. The system shall operate on short intervals, with the cycle repeating at a later time to reduce runoff.

3.11 MAINTENANCE:

Amend the Standard Specifications Sections 308-6 to read: All areas within the Work limits of this contract shall be maintained by the Contract until Final Acceptance.

3.12 START OF PLANT ESTABLISHMENT: Add the following to Standard Specifications Section 308-6:

- Criteria for Start of Plant Establishment Period:

- The Plant Establishment Period shall not start until all elements of the Project that impact the landscape are completed in accordance with the Contract Documents. Projects will not be segmented into phases.
- Permanent power to remote controllers shall be established.
- The Plant Establishment Period for the Project shall not begin until after the first mowing of the newly planted turf areas. For Plant Establishment purposes "First Mowing" is defined as the first mowing after the turf is installed. A minimum of 8% of the turf area is established and mown, the Contractor shall mow necessary to maintain those portions of turf exceeding 2" at the mowing height of 1 1/2" inches. At no time shall any turf exceed 3" in height.
- Written acceptance of the City must be obtained to start the Plant Establishment Period.
- If the project maintenance fails to continuously meet standards required, the Plant Establishment Period "day count" will be suspended and will not recommence until the Contractor has corrected all deficiencies.

3.13 MAINTENANCE TASKS: Add the following to the Standard Specifications Section 308-6.1:

- General:
During the contract period provide all watering, weeding, mowing, fertilizing and cultivation and spraying necessary to keep the plants and turf in a healthy growing condition and to keep the planted areas neat, edged, and attractive. All shrubs planted by the Contractor shall be pinched and trained as necessary to encourage new growth and to eliminate rank sucker growth. All shrubs shall be pinched and trained as necessary to encourage new growth and to eliminate rank sucker growth. Do not prune trees without written approval of the City.

B. Iron Chlorosis:

After planting and during the Plant Establishment Period, in the event that plant iron chlorosis symptoms appear, apply FE 138 Gelgry or equivalent at manufacturer's recommended rates.

C. Replacement Plantings:

During the Plant Establishment Period, should the appearance of any planting installed by the Contractor indicate weakness, that the plant shall be replaced immediately with a new healthy plant. At the end of the Plant Establishment Period, all plant materials shall be in a healthy, growing condition and spaced as indicated on the plans.

D. Fertilization:

The Contractor shall apply commercial fertilizer to all turf areas at a rate of 10 pounds per 1,000 square feet, and all groundcover areas at a rate of 5 pounds per square foot. Fertilizer shall be applied in 3 applications as a minimum, above and beyond the original soil preparation application.

E. Planting Establishment:

All planting areas that do not show a prompt establishment of plant material shall be replanted at 10-day intervals until the plant material is established. If a good rate of growth has not been demonstrated within 30 days of first planting/hydroseeding, the Contractor shall be responsible to determine the appropriate horticultural practices necessary to obtain good growth and shall provide copies of the test results to the City to verify the appropriateness of all maintenance work performed. If additional soil amendments shall be provided by the Contractor at no additional cost to the City.

F. Grading And Drainage:

During the Plant Establishment Period all flow lines shall be maintained to allow for free flow of surface water. Displaced material which interferes with drainage shall be removed and placed as directed. Low spots shall be graded to drain properly. Jute netting shall be removed from areas where erosion is evident, when directed by the Park Projects Inspector.

- Damage to planting areas shall be repaired immediately and throughout the Plant Establishment Period. Depressions caused by vehicles, bicycles, or foot traffic shall be filled and leveled. Replant damaged areas.
- All paved areas shall be washed and maintained in a neat and clean condition at all times.
- All sub-surfaces drained and inlets shall be periodically cleared of debris, leaves and trash and flushed with clear water to avoid build up and silt and debris.
- Debris and trash shall be removed from the site daily.

G. Disease and Pest Control:

Add the following to Standard Specifications Sections 308-6: throughout the Plant Establishment Period, all plants shall be maintained in a disease and pest free condition. A licensed pest control operator shall be retained by the Contractor to recommend and apply all pesticides, herbicides, and fungicides. Exterminate gophers, moles, and all other rodents, and repair damage.

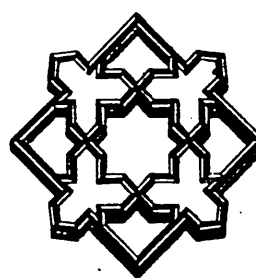
3.14 END OF PLANT ESTABLISHMENT:

- When the Contractor believes he has completed the Plant Establishment Period and the Project ready for Final Acceptance, he shall request inspection of the Project. The City shall be notified for inspection. Deficiencies noted during inspection shall extend the Plant Establishment Period until all are corrected.
- All planting areas shall show a good rate of growth and shall be well established "fill in" areas. Planting voids, bare areas will be unacceptable. Contractor shall provide soil test results for all planting areas to fill in all bare areas. Such sod or plants shall be planted a minimum of 10 days prior to the end of the Plant Establishment Period and shall have roots "knit in" to the native soil.
- Final Acceptance shall occur only upon written acceptance of this Project for maintenance by the City.

3.15 CLEAN UP:

Upon completion of the Work, the Contractor shall smooth all ground surfaces; remove excess materials, rubbish, debris, etc.; sweep adjacent streets, curbs, gutters; wash down all walkways, and trails; and remove construction equipment from the premises.

All designs and ideas represented herein are the property of Alhambra Group, Landscape Architects, and are to be used on this project only. They shall not be used otherwise without the written permission of said Landscape Architects. Any changes made by parties other than said Landscape Architects shall relieve Landscape Architects of responsibility for the project or affected portion thereof.



ALHAMBRA GROUP
LANDSCAPE ARCHITECTURE
4150 N. 4TH ST.
RECREATION FACILITIES PLANNING
27412 Enterprise Circle West, Suite 200
Tombala, CA 92590 (714) 676-0226
Job No. 92-033

APPROVED BY	DATE	BY
DESIGNED BY	DRAWN BY	CHECKED BY
REVISIONS		
APPR.	DATE	

CITY OF RIVERSIDE		
PUBLIC WORKS DEPARTMENT		
APPROVED BY	DATE	BY
PRINCIPAL ENGINEER	5/16/93	24
PARK DEPARTMENT	5/16/93	24
CHIEF P.W. ENGINEER	5/16/93	24
DATE	5/16/93	

TRACT # 27288 & 27289
REVERSE FRONTAGE
PLANTING SPECIFICATIONS

ACCOUNT NO.	R-3313 L
SHEET	L-17 OF 17

HORIZ. SCALE: 1" = VERT. SCALE: 1" =

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